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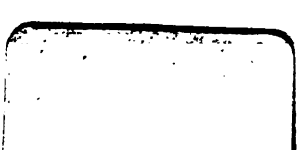

Court of Lions, Alhambra.

THE MEDITERRANEAN AND ITS BORDERLANDS

BY

JOEL COOK

AUTHOR OF "FRANCE: HISTORIC AND ROMANTIC"
"ENGLAND: PICTURESQUE AND DESCRIPTIVE"

ILLUSTRATED

IN TWO VOLUMES

VOL. I

WESTERN COUNTRIES

THE JOHN C. WINSTON CO.
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INTRODUCTION

The great Mediterranean Sea has, in recent years, grown increasingly attractive to a vast aggregation of American visitors. They go, in large numbers, to visit its famous borderlands and historic shores, and the noted islands of the sea, so that the Mediterranean Tour has become a favorite route for the pleasure traveller, and those in search of knowledge. Many of the best ocean steamships are now employed in this popular service, and the leading lines are all providing for the constantly enlarging stream of travel.

This book is designed to give an outline description of that wonderful inland ocean,— which the ancients named from their belief that it was in "the midst of the earth,"— and of its islands, and surrounding shores, with their romance and history; and also to present some account of their present condition and appearance. The narrative opens with the islands off the Mediterranean entrance, and gradually progresses from the comparatively modern regions of the western sea, to the older lands of the Levant, some of them displaying the relics of the

most ancient civilizations of the world. These venerable countries are now just dawning into a new life, with the awakening that naturally comes from the infusion of modern American and European ideals.

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THE PILLARS OF HERCULES

THE MEDITERRANEAN AND ITS BORDERLANDS

I

THE PILLARS OF HERCULES

The Strait of Gades—Hercules—Iberia—Tartessus—The Fortunate Islands—Fabled Atlantis—The Sargasso Sea—The Azores—Flores—Corvo—Fayal—Horta—Pico—St. George—Terceira—Graciosa—St. Michael's—Ponta Delgada—Madeira—Funchal—The Canaries—Teneriffe—Pico de Teyde—Ferro—Cape St. Vincent—Portugal—Sagres—Lagos—the Guadiana—Badajos—Rio Tinto—Palos—La Rabida—Huelva—Tharsis—the Guadalquivir—Bonanza—San Lucar—Andalusia—Jeréz—The Moors—Seville—The Cathedral—The Giralda—The Alcazar—The Cid—Almodovar—Cordova—The Great Mosque—Carvajales—Cadiz—Cape Trafalgar—Nelson's Victory and Death—Tarifa—Strait of Gibraltar—Calpe and Abyla—Pillars of Hercules.

FABLED ATLANTIS.

Time was, when the Pillars of Hercules bounded the end of the world for the ancients. Now, for the modern visitor coming from the West, they mark the entrance to what, for him, is almost a new world. In the view of the ancient Greeks, these

mythical guardian pillars of the Strait of Gades, had nothing but "the all-encircling ocean-river lying beyond." This strait was believed to be the southern entrance to the ocean, while the channel between France and England was the northern entrance. The Phœnicians had coasted along the shores outside, and found to the southward what were known in a hazy sort of way, as the "Fortunate Islands," while northward they had gone as far as Gaul and Britain, bringing back tin to mix with Spanish copper to make bronze, and also weird tales of the hyperborean regions of the far north and their long winter nights. They had made a settlement on the northern shore beyond the strait which they called Gades, now Cadiz, and Herodotus described Gades as "on the ocean outside the Pillars of Hercules."

The mythological hero of Greece, Hercules, is said to have been the first of the Hellenic immortals who ventured into the unexplored ocean to the westward, going there in the performance of some of his great "labors." He found a ponderous mountain enclosing the Mediterranean, but he cleft it down and tore the ridge asunder, thus opening the passage to the Atlantic, leaving massive promontories on either side, and erecting upon each, a pillar in commemoration. These pillars are now represented in the heraldic emblems supporting the Spanish national arms, with the motto *non plus ultra*—"no more

beyond," indicating the end of the mortal world, as anciently believed. They were similarly used on the silver Spanish pillar dollar, and united by a scroll — $ — became afterward the dollar mark of the United States. The early Greeks in the distant Levant vaguely called the region about the pillars Iberia; which finally came to be the designation of the Spanish peninsula; and the Phœnicians named it Tartessus, supposed by some to be the origin of the name of Tarshish of Scripture. Beyond, in the mythical Grecian idea, was the remote region of the extreme West, a land of mystery and enchantment, known vaguely by the reports of adventurous Phœnician mariners, imagined to be the unlimited domain of the setting sun, and the "Land of Promise." They saw in the evening how gorgeously the sun sets —

> Through the Hesperian gardens of the West
> And shuts the gates of Day.

To this unknown, yet admired region went the powerful Hercules for his tenth labor, when he brought back the famous oxen of Geryones, from Erythia, one of the mythical islands of the remote ocean; while for his eleventh labor he was "climbing trees in the Hesperides," where he got the golden apples from the garden of the daughters of Hesperus and slew the dragon which guarded them. Earth had given these apples to Hera, at her mar-

riage with Zeus, the garden being described as far away in the West, at the borders of ocean, in the "Fortunate Islands," and near the point of Heaven, where the sun sets. Claudius Ptolemy, the famous Alexandrine astronomer of the second century, who expounded the theory of the earth being the centre around which the solar system revolved, in his treatises and plans indicated vaguely these islands on the edge of the Atlantic beyond the Mediterranean entrance. The ancient thought has been prettily used by Joaquin Miller in his sonnet, *The Fortunate Isles.*

You sail and you seek for the Fortunate Isles,
The old Greek isles of the yellow-bird's song,
Then steer straight on through the watery miles,
Straight on, straight on, and you can't go wrong.

Nay, not to the left, nay, not to the right,
But on, straight on, and the isles are in sight,
The Fortunate Isles where the yellow-birds sing
And life lies girt with a golden ring.

These Fortunate Isles, they are not so far,
They lie within reach of the lowliest door;
You can see them gleam by the twilight star,
You can hear them sing by the moon's white shore.

Nay, never look back! Those leveled grave-stones
They were landing steps, they were steps unto thrones
Of glory for souls that have sailed before,
And have set white feet on the fortunate shore.

And what are the names of the Fortunate Isles?
Why, Duty and Love and a large Content;

Lo, these are the isles of the watery miles
That God let down from the firmament.

Lo, Duty and Love and a true man's Trust;
Your forehead to God, though your feet in the dust;
Lo, Duty and Love and a sweet babe's smiles,
And these, O friend, are the Fortunate Isles.

The Pillars of Hercules were upon the two rocky promontories, Calpe, on the northern side of the Strait — now Gibraltar — and across on the African coast, Abyla, near Ceuta, now known by the English name of Apes Hill. Out somewhere beyond, yet located very indefinitely in the imagination of the ancient world, was the fabled island of Atlantis. Homer, Horace and other classical writers, called it the "Garden of the Hesperides" and the "Elysian Fields," and it was believed to be the Home of the Blessed. There was a general idea among most of the ancient races of Europe, that Heaven was across the unexplored western sea. As to the real existence of Atlantis, and its actual character, there were differing opinions, leading to many disputes. It was described as a Continent, lying over against the Pillars of Hercules, in extent greater than Lybia and Asia put together, and Plato said that it was the passage to other islands, and another extensive continent, of which the Mediterranean was only the harbor. Thus, even at that early time was vaguely hinted the existence of America. Plato wrote that the Egyptian priests at Saos had given

Solon a description of Atlantis, and of the great power of its people. The legend ran, that nine thousand years before the time of Plato, Atlantis was populous and powerful, and had conquered the western portions of Europe and Africa. At one time, its whole power was arrayed against the nations bordering the Mediterranean, and all yielded to the mastery of the invaders excepting the Athenians. Solon is quoted by Plato as saying that he had heard the most famous of all the Athenian exploits was the overthrow of Atlantis. "Then did your city bravely," said Solon, "and won renown over the whole earth. For at the peril of her own existence, and when the other Hellenes had deserted her, she repelled the invader, and of her own accord gave liberty to all the nations within the Pillars. A little while afterward there was a great earthquake, and your warrior race all sank into the earth, and the great island of Atlantis also disappeared in the sea." This traditionary submergence took place long before historic times, some say at least eighty thousand years, and was attributed to the intervention of the gods coming to the rescue of the peoples, the legend being one of the most interesting of the ancient myths. The bottom of the Atlantic ocean is formed of two deep basins, one on each side of a broad and shallow central plateau, extending from the Hebrides southward to the Azores, thence turning southwest, and finally northwest to Bermuda.

This may have been the configuration of the fabled island. The ocean is very deep between the Azores and Madeira, and between both groups of islands and Portugal, averaging fifteen thousand feet.

THE WESTERN ISLANDS.

The voyage across the Atlantic, eastward from the United States to the Mediterranean, goes over the supposed location of fabled Atlantis, which gave the ocean its name. It is a pleasant journey, quickly bringing the traveller across summer seas. The Mediterranean entrance is in latitude 36° north, and opposite Kittyhawk, in front of Albemarle Sound, North Carolina. The distance from New York to Gibraltar is about 3215 miles. The journey is usually marked by gorgeous sunsets, pleasant days and lovely nights when the bright moon shines, and one soon enters a region of warmer weather than on the American coast. It has been well described as "the picturesque route to Europe" by an ocean thoroughfare which is becoming more and more travelled. The location of fabled Atlantis is still marked by many outlying islands, dotted about the region environing the Mediterranean entrance, which are really the tall summits of mountains rising from the bottom of the ocean, and from the great dividing submerged plateau of the North Atlantic. They are in three groups — the Azores, the Madeiras, and southward, off the African coast, the Canaries.

The route from New York, at about 2300 miles distance, passes directly through the archipelago of the Azores, or Western Islands, and thence to Cape St. Vincent, the southwestern buttress of the Iberian peninsula, and along the coasts of Portugal and Spain, to Gibraltar. The steamer's prow is pointed a trifle south of east when leaving Sandy Hook heading for the island of Fayal, and one of the new attractions the sea provides as the Azores are approached, are the fleets of the nautilus, those little "Portuguese men-of-war" as they are popularly called, sailing gaily on the water in the evening like bubbles blown by the wind. Another peculiarity of the voyage is its route near the northern verge of what is known as the "Sargasso Sea." Between the Antilles and the Azores appears this vast floating mass of seaweeds, covering several hundreds of square miles of the ocean, and drifting about in rafts or islands, as they may be, veered by the varying currents of the Gulf Stream. The mass sometimes becomes so dense as to retard navigation. It was passed through by Columbus on his first voyage of discovery, he and subsequent Spanish navigators calling it the *Mar de Sargaco,* the weeds being known as the *Sargassum.* They seem to live and propagate themselves on the surface of the water and the floating masses sustained by little air-filled berries give permanent homes to many small pelagic animals and

others seeking them for food. Cornelius George Fenner has based upon this his pretty sonnet:

A weary weed tossed to and fro,
  Drearily drenched in the ocean brine,
Soaring high and sinking low,
  Lashed along without will of mine;
Sport of the spoom of the surging sea,
  Flung on the foam afar and anear;
Mock my manifold mystery,—
  Growth and grace in their place appear.

I bear round berries, gray and red,
  Rootless and rover though I be;
My spangled leaves, when nicely spread,
  Arboresce as a trunkless tree;
Corals curious coat me o'er,
  White and hard in apt array;
'Mid the wild waves' rude uproar,
  Gracefully grow I, night and day.

Hearts there are on the sounding shore,
  Something whispers soft to me,
Rootless and roaming for evermore,
  Like this weary weed of the sea;
Bear they yet on each beating breast
  The eternal type of the wondrous whole;
Growth unfolding amid unrest,
  Grace informing with silent soul.

The Azores are a group of nine islands stretching in an oblique line for about four hundred miles from northwest to southeast, between latitudes 40° and 36° north and longitudes 31° and 25° west. They are eight hundred miles off the Portuguese

coast, to which nation they belong, and are in three clusters. The westernmost pair, Flores and Corvo, are to the northward of the usual track of vessels which are bound to the central cluster, the five islands of Fayal, Pico, St. George, Terceira and Graciosa, while another pair, St. Michael's and Santa Maria, are to the southeastward. The early discoverers found numerous hawks and buzzards on these islands, whence come their name, derived from the Portuguese word *Açor,* meaning " a hawk." The Arabian geographers who first knew them made special mention of these birds. The Flemish navigator, Vanderberg, in 1432, was driven on them by stress of weather, and this attracted attention at Lisbon, leading to subsequent Portuguese and Spanish possession. They became the convenient rendezvous of the fleets going to and from the Indies, and a calling place for voyages in all directions across the Atlantic. These islands are elevated and undulating in outline, rising into peaks, and having almost continuously high and precipitous coasts; the whole archipelago being of volcanic origin, and there having been numerous eruptions and earthquakes, especially in St. Michael's, Villa Franca, the capital, having been thus destroyed, with six thousand people, in 1522. Frequent eruptions have occurred since, the worst being in 1841, and they were sometimes accompanied by subterranean outbursts, of which a remarkable one appeared in June 1811,

off the western end of St. Michael's, a conical crater of ashes and lava rising three hundred feet above the sea but soon disappearing. This volcanic island was seen to arise by the crew of the British war-ship *Sabrina,* and the commander named it after his ship. There is an equable and most lovely climate, although severe storms often rage around the islands. The area of the group is about nine hundred square miles, and their population approximates 255,000. When first visited by the Portuguese, there were no human inhabitants found, and only a few animals, but plenty of hawks. The benign and somewhat humid atmosphere clothes them with luxuriant vegetation, which the natural fertility develops in perfection.

The remote northwestern pair of islands of the Azores, being distant from the usually travelled route, are seldom visited but are attractive. Flores got its name and world-wide fame from the abundant luxuriance of its flowers, and is also known for its fine poultry and attractive though diminutive cattle. It is 1708 miles east-southeast of Halifax, and 1176 miles west of Cape Roca, the most western part of the coast of Portugal. Little Corvo is a quaint gem, seventeen miles to the northward of Flores, a beautiful island, bold in outline and covered with the most delicious green. It is about five miles long and almost an oval. This diminutive island has various privileges of government, its own

mayor and senate, and the peasant proprietors who sit as senators own their lands. They have been very exclusive, but of late years have intermarried with the people of Flores and some have even migrated to Brazil. The story is told that seldom wearing shoes or stockings, the dignified senators of Corvo usually attended the sessions barefooted, but had a sharp lookout kept, so as to be warned of boats arriving from Flores in time to adjourn the session and not be caught by the visitors when sitting with uncovered feet.

It was almost at the foot of a cliff a thousand feet high on the southern coast of Flores, and upon jagged rocks known to the natives as the "Mouth of Hell," that the Cunarder *Slavonia* went ashore in a fog, June 9, 1909, and was wrecked, though every life was saved, the passengers being taken to the Mediterranean by ships quickly summoned through the agency of the wonderful alarm calls of the wireless telegraph. A special memory of Flores, however, comes from Tennyson's *Ballad of the Fleet,* which begins with the line "At Flores in the Azores, Sir Richard Grenville lay." It was off Flores in 1591 that this British vice-admiral had his famous sea fight of "the one and the fifty-three." Grenville was one of Sir Walter Raleigh's captains and colonists, who made various voyages to Carolina and the West Indies. When the Spanish Armada came in 1588 to attack England, Queen Elizabeth

made him a member of her council to devise means of defence, afterward appointing him vice-admiral, and he was among the sea dogs that in subsequent years kept watch on the Spanish fleets after the Armada had dispersed. Off Flores in 1591 in his ship *Revenge* he encountered a Spanish squadron of fifty-three vessels with ten thousand men aboard. The *Revenge,* of 500 tons, had thirty guns and a crew of one hundred with a small body of gentlemen volunteers. The *San Philippe,* her chief antagonist, was of 1500 tons with seventy guns. He promptly went out to give battle, the contest beginning at three o'clock in the afternoon, and fought all night till daybreak, Grenville beating off the Spanish ships sixteen times, sinking four of them and killing a thousand Spaniards.

Ship after ship, the whole night long, their high-built galleons came,
Ship after ship, the whole night long, with her battle-thunder and flame;
Ship after ship, the whole night long, drew back with her dead and her shame.

Grenville was wounded early in the fight, but refused to go below, crying, "Fight on, Fight on!" Afterward he was shot through the body and carried into his cabin, and soon nothing was left but a shattered hulk, with masts shot off and powder almost gone, most of the crew being slain, but he declined to surrender, saying:

Sink me the ship, Master Gunner,— sink her, split her in twain!
Fall into the hands of God, not into the hands of Spain!

But as he lay dying, the few survivors, too weak to fight longer, surrendered, and the doughty admiral was taken aboard a Spanish ship, where he soon afterward expired, thus fitly closing the remarkable contest.

The steamer from the United States usually enters the archipelago in the central group of islands, approaching the western extremity of Fayal at Point Comprado and coasting along the northern shore past Cedros Point. This island, named for its prevalent indigenous shrub, the "fayo," a species of beech, presents an impressive appearance, its surface sloping grandly down from the mountain, 3,600 feet high, which is the prominent feature of the view. It is nine miles long and has a picturesque coast, under the contrasting colors of light and shade made by the brilliant morning sun, with all parts of the tillable surface carefully planted and cultivated. The island is quickly passed and the steamer rounds the northeastern buttress into the harbor of the Villa de Horta, the great port of call for vessels passing through the Azores. This village of about eight thousand people scattered over the hill slopes, borders a fair roadstead some two miles long upon the Fayal channel separating Fayal from Pico, the next island to the eastward. The little harbor is bravely

defended by two old castles down at the waterside and a wall; but in the onward world progress, such antique works are more for show than strength. Behind these medieval defences, the flat-roofed adobe houses glisten brightly in the sunlight, with high cliffs towering above them.

But the grander view is the outlook from Horta upon the island across the channel, Pico, or "the peak," only three miles away. This is a most remarkable island, composed chiefly of an immense conical mountain of volcanic formation, rising 7,613 feet, its soil being pulverized lava, and the lower slopes well cultivated. It is the great attraction of the Azores. Rising boldly from the deep blue sea, and standing in faultless outline sharply cut against the sky, the white surf-line fringing the deep green below, and fleecy clouds sailing slowly above, this beautiful cone is elevated a mile and a half above the water, faint smoke from its internal fires escaping from the summit. This smoke is regarded by the people as a harbinger of safety. When it ceases to appear they are in alarm, fearing an eruption and disturbance, and take refuge in the low structures scattered about, which are called "earthquake houses." Pico is a grand sight in the approach from the west in the early morning, with the sun just rising behind it, the white smoke jet at the top plainly visible, the clouds floating below the whitened summit, tinted with the rose, while the

sloping sides are still enveloped in a semi-darkness that intensifies their deep green shades. Passing northward of Pico, the steamer sails eastward through the broad channel dividing it from the long and narrow island of St. George. Gradually crossing this channel, the coast of St. George is approached nearer, the hill slopes from the long central mountain backbone forming it, falling off gracefully to the sea, displaying pasture and grain fields, vineyards and forest. This island is almost thirty miles long, and its chief town nestles along the shore, the Villa de Vellas, the "city of the watch-towers," its houses rising in terraces, encircled by green orchards and vineyards in the surrounding amphitheatre of hills.

Sailing beyond the promontories marking the eastern end of St. George, the steamer crosses the intervening strait to the picturesque island of Terceira, so named because it was the third island of the group in the order of discovery, and being central in position it has been made the capital of the Portuguese province of the Azores. Steaming slowly along its rock-bound coast, the capital city of Angra is passed in review, a little port upon a comparatively fair harbor. This white-walled town is in a romantic situation, nestling closely beside the sea, the land sloping upward in steep acclivities behind, and encircling it from the west around to the north, so that the town faces toward the southeast.

A short low isthmus connects with a southern protruding promontory having three rounded summits, rising some eight hundred feet, the southern extremity presenting a perpendicular wall to the breakers beating at its base. At the edge of this promontory toward the town are the battlements of an old fortress crumbling in picturesque ruin, and thence a sea-wall extends to the little harbor. Behind the town is the mountain chain forming the backbone of Terceira, and from its central peaks spreading off into bold promontories at either extremity of the island. To the northwest of Terceira and northward of St. George, is Graciosa, so named from the extreme beauty of its scenery. It is very attractive, and has a port Santa Cruz, but is off the customary route of vessels. Out in the ocean between Graciosa and Terceira is the spot where an eruption in June 1867 threw up a volcanic island that afterward disappeared.

Stretching from Terceira to St. Michael's, the largest of the Azores, and about one hundred miles to the southeast, the bottom of the sea is a submerged plateau generally at two hundred fathoms depth, while outside it the water is at least ten times as deep. Sailing over this stretch, with the brilliantly colored shores of Terceira diminishing in the distance, the traveller cannot help thinking that here at least may be sunk a part of the lost Atlantis. Then the widely spreading shores of St. Michael's

come in sight, changing from blue to gray and then to green with the approach. Rounding the western extremity rising like a vast truncated cone sending its perpendicular cliffs down to the sea, the capital of Ponta Delgada presents at the waterside a thick cluster of white buildings with red-tiled roofs, encircling a small open bay in the curving shore, with gardens on the higher ground and conical-topped hills behind. On the one hand bold rocks rise from the sea backed by the elevated crater of the Cidades, while on the right a long curve of shore broken only by the jutting cliff of the Dog's Head has beyond it the crowning mountain of the island, the stately Serra d'Agoa da Pau, elevated over 3000 feet. The little harbor protected by a breakwater is formed by the projection of a point of land giving the place its name of Ponta Delgada, the "sharp point." Out in front there is said to be no known land between it and the South Pole, and hence the need of the protective breakwater.

The island of St. Michael's covers about two hundred and twenty-four square miles, rising into a central mountain range stretching from east to west and culminating in the central Serra d'Agoa da Pau. These mountains have a rich and wooded appearance, their flanks falling gradually off to the sea all around, but presenting the finest scenery in the bold western cliffs which culminate in the Serra Gorda, 1574 feet high. There are numerous hot springs in

the island, and vapor issues from various crevices, particularly in the Valley of the Furnas, near the western verge, where there are boiling fountains, spouting up in jets, dissolving into clouds of steam. Some of these hot springs have valuable medicinal qualities, and this with the balmy climate has made the island a popular health resort. Among its products is tea, which is grown for the Lisbon market, whither a good deal is sent. Ponta Delgada, the capital, has about sixteen thousand population, and is a resort for many vessels, mostly fishermen and tramp steamers coming for salt and coal, with mail boats arriving twice a month from Portugal and also steamers crossing to and from the Mediterranean, although it is not regarded as being as convenient a port of call as Horta. The two prominent buildings from the water view are a huge yellow prison, and the white cathedral with a heavy square tower. There are a couple of quays, and the churches seem to have all been built of basalt covered with pinkish stucco. A picturesque triple arch built in 1785, which is the entrance to the quays, has behind it the Praca or public square, on which fronts the cathedral or "Matriz," as it is called, built during the reign of King Manuel, the son-in-law of Ferdinand and Isabella, and the patron of the noted navigator Vasco da Gama, who carried the Portuguese flag to the uttermost parts of the then known world. There is also a peaceful and most inoffen-

sive looking semi-ruinous old fort that may have been built in that heroic time. At the end of the square opposite the cathedral is the ancient Town Hall, bearing the Moorish coat-of-arms, and between them is the fashionable promenade. Low shops with red-tiled roofs border the square, and on these roofs are usually spread to dry the bags of coffee coming from Brazil, which provide much trade. A liberally supplied fountain pours out its copious jets in the centre of the square, and here the populace get their drinking water in all kinds of casks and other vessels. The houses of the spreading town are usually built in gardens, so that the place is a mass of luxuriant vegetation, some of the gardens being famed for their growth of fruits and flowers. Thus Ponta Delgada is attractive as well as antique, and it adds to the picturesque beauties so bountifully displayed throughout these pleasant islands.

MADEIRA.

The group of the Madeira islands is nearer the African coast, about five hundred miles southeast from St. Michael's in the Azores, and three hundred and sixty-five miles from Africa, in latitude 32° north and longitude 17° west; and this group is also an appanage of Portugal. The characteristics are much similar to the Azores, but the group is more compact, the chief island being Madeira, about thirty miles long and thirteen miles wide in the ex-

treme breadth, its bold wooded shores naturally giving the original name, *Materia,* meaning " wood." The smaller island of Porto Santo is about twenty-five miles to the northeast, and in the southeastern offing are three rather spacious but practically uninhabited rocks called the Desertes, these being conspicuous objects in the sea view from Funchal on the southern coast, which is the capital, and port of call for many vessels bound to the Mediterranean. The Madeira group embraces about five hundred square miles of surface and has 160,000 population, the submarine telegraph line from Lisbon to Brazil being laid through it.

Madeira island is traversed from east to west by a mountain chain, rising generally to about 4000 feet elevation, forming a substantial backbone, but cut down by various deep ravines which penetrate the ridge from both coasts. The highest summit, Pico Rurvo, rises 6100 feet in the centre of the island, and several adjacent summits of the ridge are but little lower in elevation. The narrowness and startling depth of the ravines, the loftiness of the rugged peaks towering above, the many beautiful sea vistas and bold coast precipices, make scenes of striking grandeur and picturesque beauty that constantly change to the eye of the moving tourist. The high ridges between the ravines mostly terminate in lofty headlands of dark basalt, falling off precipitously to the sea, and some rising almost two

thousand feet. Thus much of the coast is bounded, the northern side, having been most exposed to the sea erosion, displaying the wilder scenery and having bolder precipices than the southern shores. Some of the deep valleys on the northern side still grow fine trees, but on the southern slope little is left of the original forest giving the island its name. The eastern extremity of the island is an elongated, narrow and comparatively low promontory, with sandy adjuncts known as the "Fossil Bed," and upon an inlet off this promontory is Madeira's only lighthouse, having a flashing light visible for twenty-five miles to approaching vessels.

Tradition indicated that the wandering Phœnician mariners first discovered Madeira very long ago, and Pliny mentions the Purple or Mauretanian islands, which may have been this group. Prior to the fourteenth century the Portuguese found them, and there is a romantic story of two eloping lovers fleeing from England to France in 1346, who were driven far southward by a violent storm and cast on the coast of the uninhabited Madeira, at a place afterward given the name Machico, after the fleeing Romeo, whose name was Robert Machin. This episode seems to have given Portugal the idea of taking possession, and while without population then, they are considered to now be too densely peopled in relation to the amount of cultivable surface, which is comparatively small. A vast amount

of labor has been expended upon the soil, partly in erecting stout walls to prevent its being washed away by the torrential rains, and also in building up spacious terraces to lessen the steep slopes. Numerous water courses have been constructed to provide a comprehensive system of irrigation, without which the island could not produce a hundredth part of its present yield. The rocky character, elevation and steep inclination of the higher parts of the island are a bar to all successful tillage. The chief access to the interior, which is obstructed by the many deep ravines, is obtained by a road constructed around the entire coast, that in many places displays most picturesque scenery, the route being often between lofty cliffs, or along the front of precipices overhanging the deep blue sea.

The approach to Funchal on the southern coast is beautiful. The town of white houses with red-tiled roofs, tier above tier, spreads upon the curving shore and slopes of a large bay, being backed by an imposing amphitheatre of lofty mountains. It is irregularly built, with narrow, winding streets, and out in front projects an old castle commanding the roadstead in the ancient days, perched on the top of the steep black basaltic cliff called the Loo Rock, which is surrounded by the sea at high water. Rising above and behind the town, numerous country houses with terraced gardens and vineyards adorn the slopes, with occasional patches of sugar cane,

giving attractions to the pleasant landscape, while among these on an eminence is a larger fortress of more modern build, that is the chief defence. The harbor is poor, however; vessels have to lie in an open anchorage, passengers are taken off in boats and cargo is lightered; and when the wind blows freshly from the south, they risk being driven ashore unless they slip their cables and put out to sea. There is ample protection, however, from other winds. The entire produce of the island, mostly wine, sugar and fruits, intended for export, is shipped from Funchal. The wine is chiefly the Madeira, and known in the trade as "London particular," but this wine trade has declined in recent years. There have been gathered in Funchal a population of about twenty thousand, and upon landing here, as in other Portuguese ports, the traveller is introduced to the surprising mysteries of the Portuguese currency. The unit of account is the *reis* (ray), about the value of one mill of American money, nominally, but owing to the depreciation of the currency since the national bankruptcy of 1892, the disappearance of gold and of most silver coins, and the excess of paper, the actual value is even less. The visitor is startled by a hotel bill based on three thousand to four thousand *reis* per day, and tips requiring one to two hundred *reis,* but when it is all ciphered out in the American equivalent the actual financial damage done is about

the same as elsewhere in Europe. One thousand *reis* make one *milrei,* which is popularly the dollar, and was the chief coin, when they circulated.

The methods of Funchal are somewhat primitive. Wheel carriages are scarce, and goods are transported either on the backs of mules, a necessity on account of the steep mountain paths, or on sledges drawn by bullocks, while the common people carry heavy burdens on the head and shoulders. The visitor upon landing at the stone steps of the old breakwater, which extends out to a rock so as to partially protect the harbor, is taken upon an observation tour around the town. This is done on a low sled with cushioned seats, drawn by a pair of bullocks, without reins, the driver being loud-voiced and frequently using a prodding stick. He also has a bunch of greasy rags which he throws under the sled runners as a lubricant when the friction upon the stone pavement becomes too harsh. Behind the town a funicular railway climbs the mountain-side to the place of grand outlook above. When returning from the ride, the sled without the bullocks glides like a toboggan for about two miles down the slippery stones of the steep road, thus making a rapid and sometimes sensational descent.

The equable climate has made Madeira a favorite resort for invalids, and its merit is warmly praised, Sir James Clark, a celebrated English authority, saying, " The climate of Madeira is the finest in the

northern hemisphere," because of the mildness of the winter and the coolness of the summer. Although these islands are of volcanic origin, and are the summits of very lofty mountains having their bases in an extremely deep ocean, these Madeira volcanoes were long ago extinct, there being at the present day neither live craters nor smoking crevices. They were built up by the emission of material from craters long ago, and by upheavals rising thousands of feet, but these geological processes ceased in the distant past.

THE PEAK OF TENERIFFE.

The most extensive of the groups of islands outlying from the Mediterranean entrance are the supposed partly mythical "Fortunate Islands" of the ancients, the Canaries, which are off the African coast some distance to the southward. There are thirteen in the group, seven being large islands, and the others mainly rocks. With an aggregate surface of over twenty-eight hundred square miles, this archipelago has a population of 350,000, and here was originally found the canary bird which has been so universally domesticated by all civilized nations. The nearest of the group to the African coast, Fuerteventura Island, is distant about fifty miles, and the largest of the islands, Teneriffe, is two hundred and fifty miles south-southeast from Madeira. The archipelago is in latitude 27° to 29° north, and

13° to 18° longitude west. The ancient ideas of these "Fortunate Islands," believed to be the Home of the Blessed, were put into a sort of form by both Plutarch and Ptolemy, such knowledge as then existed coming from the reports of the wandering Phœnician mariners. Pliny mentions "Canaria, so called from the multitude of dogs of great size," and "Nivaria, taking its name from the perpetual snow and covered with clouds," from which was derived the name of Teneriffe. In 1334, they were rediscovered, and Spain took possession, still controlling them. Like the other groups, these islands are the summits of mountains, rising from an ocean of great depth, and the two largest are Teneriffe, covering 877 square miles, and the Grand Canary, with a surface of 718 square miles. The chiefly visited island is Teneriffe, which is about sixty miles long and has a breadth in the widest part of thirty miles, although not over one-seventh of the surface can be cultivated. A mountain chain traverses it in the direction of greatest length, and in the middle of the broadest part of the island rises its celebrated peak, which has world-wide celebrity.

The Pico de Teyde, the famous Peak of Teneriffe, with its ample supports and outlying space, occupies two-thirds of the island. It has a double top, the highest summit, El Piton, rising 12,200 feet, and the other, Chehorra, connected with the first by a short narrow ridge, elevated 9880 feet. Both are orifices

in the same grand dome of trachyte, though neither reaches the line in that latitude of perpetual snow, but there is a natural cavern about 11,000 feet above the sea, where snow is preserved all the year; and snow remains for about four months on the upper parts of the summits. The Peak rises from what are known as the Pumice Stone Plains, and the adjacent ridge with the volcanic cone above, resembles in aspect a colossal fortress with circular ramparts and an enormous ditch. The immense ramparts encircling the cone are about eight miles in diameter, and in some places tower fully five hundred feet above the ditch. These rocks are of very old construction, and the more modern cone is a pile of ashes, pumice and lava, that has been thrown up during more recent centuries from an ancient crater, but this famous peak has been practically quiescent for over two hundred years. Both El Piton and Chehorra have craters on their summits from which now issue steam and a little sulphurous vapor, as gentle reminders of the active past. The El Piton crator is about seventy feet deep and three hundred feet across. Chehorra's crater, at a lower level, is much larger, being four thousand feet in diameter and over one hundred and fifty feet deep. There is no account in history of serious eruptions from either peak, but in 1795 there was an outpouring of lava from vents at lower elevations on the eastern side of the mountain, though since 1798 no eruption had

occurred until 1909. In June there was a slight earthquake shock on the western coast, while in November there were more shocks, and lava poured out from five vents for several days, causing alarm among the people.

Under shadow of the enormous peak, on the southern coast is the chief town and capital of Teneriffe — Santa Cruz de Santiago — where the Spanish Governor-General of the Canaries resides. It is defended by several batteries on the edge of the sea, and probably the greatest fame the place has ever achieved was the one honor of defeating an attack by Admiral Lord Nelson, the famous sea-fighter of England, in 1797, on which occasion he lost his arm by a shot from one of these batteries. Several English flags then captured still hang in the church. The view of the town and the approach are superb. Humboldt has written that he "never beheld a prospect more varied, more attractive, more harmonious, in the distribution of the masses of verdure, and of rocks, than the western coast of Teneriffe." The date palms are an impressive feature of the landscape.

During half the year, from April to October, a northern or northeastern wind of more or less strength blows upon these islands from ten o'clock in the morning until five or six o'clock in the afternoon. During the summer this colder wind produces a dense stratum of sea-cloud, about a thousand feet

thick, its under side being elevated three thousand feet above the sea level at Teneriffe. This cloud, however, only covers the sea and does not reach up to the higher mountains inland, which at the same time have on every side a cloud stratum of their own about five hundred feet thick, its lower surface being twenty-five hundred feet above the sea level. Between the two distinct cloud strata, there is usually a narrow gap, through which the visitor on a vessel approaching the island may obtain a glimpse of the mass of the mountain, while above the higher cloud rises the cone-like summit in the clear air, sharply outlined against the sky. The visitor ascending the mountain when these clouds are formed, looks down upon their white, fleecy masses which conceal the sea and distant islands of the group, excepting where the mountain tops may pierce through. The view from El Piton, when no clouds intervene, is magnificent, and most extensive, including the whole Canary archipelago and displaying a horizon one hundred and forty miles distant, as the mountain rises nearly two and one-third miles. The Island of Madeira, and the African coast, however, are beyond the range of vision. In 1856, Charles Piazzi Smyth, the British astronomer, constructed his observatory and placed his telescope on the Peak, at Alta Vista, 10,700 feet above the sea. Here he made various observations and, as he said, verified Newton's surmise of years before, that a

"most serene and quiet air may perhaps be found on the tops of the highest mountains, above the grosser clouds."

The Peak of Teneriffe is the highest mountain in the world which rises directly from the sea, and one of the noted displays unfolded by its ascent is its elongated shadow, when the observer is able to get the view in a clear morning at sunrise. The sun then comes up over the dry African desert through an atmosphere of unrivalled clearness and his rays as they flood the broad expanse of the Atlantic meet their only obstruction in this mighty mountain. A traveller who was thus fortunate describes the view, having got to the summit before the dawn. He writes that in the clear gray light preceding the dawn, the whole of the islands of the Canary group were visible with more distinctness than after the sun had risen, while fifty miles distance in such an atmosphere seemed almost nothing, so that the Grand Canary to the eastward and Los Palmas looked close below, and one was almost tempted to throw a stone upon Gomera, thirty miles away. Then the sun appeared and slowly rose, so that turning the eyes westward, there in long dim outline the gigantic shadow just crossing the northern point of Gomera was laid across the sea, stretching to the horizon and seeming to extend fully two hundred miles. The Peak's shape is clearly seen, though shadowy, but each minute as the sun rises

higher and the rays grow stronger, the reality increases. The shadow seems to lift itself up from the sea, on which at first it lay, until, a quarter of an hour after the sunrise, there apparently stands beside us another peak, not rose-colored as the real one, but dark and threatening, seeming substantial, yet showing through it far away the island and the clouds that hang above the sea. The flood of light increases, but this lessens the clearness of the distant view, while bringing out each object on the little island beneath, disclosing each house and tree, and displaying all around the clear-cut, sea-washed boundaries of Teneriffe itself, with its sixty miles of length, and every creek, ravine and coast-headland depicted as clearly as on a map, but here and there the forming clouds begin to break the outline, though the summit from which one looks is nine thousand feet above them. Upon the summit crater, too, this morning light has splendid effect. The delicate yellow of the sulphur fumes mingles with pale pink, both softened by a creamy white, making a beautifully chaste coloring in striking contrast with the miles of rugged dark brown lava from which the crater-surmounted cone springs several hundred feet below. Jets of hot steam puff from the sulphurous cracks, and here are cooked the eggs for breakfast in a steam-heated oven ready at hand among the lava beds and supplied by fires perhaps at lower levels than those which prepare the breakfasts of

the people down in Santa Cruz. The view is sublime and the morning shadow of the great mountain over the unobstructed sea is probably the greatest that the world discloses.

The smallest island of the Canary archipelago is Hierro or Ferro, and it is the most westerly of the group, shaped somewhat like a crescent and located ninety-two miles west-southwest of Teneriffe. The high and steep rocks bounding its shores give the coast line an impressive appearance. Ferro was best known to the world in earlier times as the point of the "first meridian," ancient European geographers taking it as the initial measure for longitude, as it was the most westerly land they knew. The longitude they assigned to Ferro was, however, too far west in the original maps. It is interesting to recall that Ptolemy made Fuerteventura, the nearest of the Canaries to Africa, his first meridian, and that this island was originally adopted by Mercator, but the latter afterward changed to Corvo, in the Azores, because he there more nearly approached the true indication of the magnetic needle. The Dutch, when they became a maritime power, adopted the Peak of Teneriffe for the first meridian. In 1630, Cardinal Richelieu called a congress of scientists who considered the subject, and they adopted the meridian of Ferro for the first meridian, it being officially promulgated by Louis XIII in April, 1634. Thus the "longitude of Ferro,"

formally established, came into almost universal use, continuing until the beginning of the nineteenth century, when England, coming to the front as the leading sea power, through Nelson's victories over the French and Spanish navies, adopted Greenwich for the first meridian.

IBERIA.

The traveller crossing the Atlantic, approaching the Mediterranean entrance from the Azores, usually sights the first land in the bold cliffs of Cape St. Vincent, Portugal, the southwestern buttress of the Iberian peninsula. This was the Promontorium Sacrum of the ancients and a powerful light guides the mariner past it. Steep and almost inaccessible cliffs rise up from the sea to form this massive buttress, which is the abrupt termination of the mountain range of the Serra de Monchigue. The lighthouse is on the brow of the promontory, standing amid the ruins of an ancient convent. The neighboring coasts, however, are generally low and sandy. Cape Roca, to the northward, outside of Lisbon and the mouth of the Tagus, is, however, the most western land of Portugal, protruding somewhat beyond Cape St. Vincent. This is ancient Lusitania, a noted region, first colonized by the Phœnicians, who seem to have covered almost all the Portuguese and Spanish coasts in the early days. Then it was conquered by the Carthaginians; overrun by the

Vandals and Visigoths; occupied by the Moors in the eighth century; and in the eleventh century made a fief of Count Henry of Burgundy, which began the active history of the county, afterward the kingdom of Portugal. The name came from its capital, then called by the Latin title of *Portus Cale,* though this city has since been known by its popular name of O Porto, or "the port." Growing to great power, Portugal divided with Spain the colonization of the world in the fifteenth century, though King John II made the mistake in 1485 of dismissing Columbus as a visionary. John outfitted the expedition of the famous Vasco da Gama, however, who during the subsequent reign discovered the sea route to India. It was during the reign of John II, in 1494, that the pope issued his famous bull, dividing the undiscovered parts of the world between the Spaniards and the Portuguese. Emmanuel the Fortunate succeeded John, and then Vasco da Gama made his important discoveries in the East Indies, and Pedro Cabral found Brazil, while on his way westward to find India, Amerigo Vespucci discovered the Rio Plata and Paraguay; and Portugal thus secured vast conquests in the East Indies, China and South America.

Before the days of Columbus the Portuguese Prince Henry, who was called "The Navigator," on account of his zealous encouragement of ocean exploration, had founded on Cape St. Vincent, the

town of Sagres, with shipyards and a maritime school, which became the headquarters of the Portuguese exploring voyagers. To the eastward was developed in the seventeenth century, the port of Lagos on the coast, and it is still an active seaport with the old fortifications of that time. The greatest fame of Cape St. Vincent, however, comes from the naval battle fought in the adjacent waters, February 14, 1797, when Admiral Jervis, ably seconded by Nelson, defeated the Spanish fleet. In this engagement the British Mediterranean squadron of twenty-four vessels fought the enemy's fleet of thirty-nine, almost annihilating it, and capturing four of the largest ships. For this victory, Jervis was created Earl St. Vincent. To the eastward of the cape, the steamer skirts the southern shore of Portugal along the province of Algarve, a region growing cork trees, fruit and wines, and having various ancient villages on the shallow harbors indented in the coast, that are still showing evidence of their Moorish origin. Beyond the shore sweeps around the wide circle formed by the Bay of Cadiz, and here flows in at the boundary between Portugal and Spain, the grand river Guadiana, the Moorish *Wadi Ana,* the ancient Anas of the Romans, which follows a course of five hundred miles from its source in the elevated and sterile Spanish plateau of La Mancha, through Estramadura, west and southwest to the sea. La Mancha is derived from an

Arab word meaning the "desert." The Guadiana breaks out of the mountain ranges of the Sierra Morena in a series of foaming rapids, so that it is only navigable for about forty miles of its lower course. On its way, the river passes the famous frontier fortress of Badajos, known as the "key of Portugal," scarred by many battles and sieges, its last capture being by Wellington in 1812, who took it from the French, to whom it had been surrendered by treachery the previous year.

The Spanish coast to the eastward of the Guadiana is generally flat, and at a short distance the Rio Tinto enters the Atlantic in a region of the liveliest historical interest. On the eastern river bank is the magnificent little white village shining in the sunlight — Palos de la Frontera — from which Christopher Columbus sailed August 3, 1492, with his three little vessels, the *Santa Maria,* the *Pinta,* and the *Nina,* on the voyage that discovered America; and here he landed on his return, March 15, 1493. Cortes also landed at Palos in 1528, returning from his conquest of Mexico. Just below the village is the Convent of Santa Maria la Rabida. It was here that Columbus retired in 1485 in despair after John II of Portugal had declined to be his patron, and the prior of the monastery, Peres de Marchena, who had been Queen Isabella's confessor, subsequently took interest in his plans and got the Queen to consider the arrangement for his

voyage, induced by the hope of spreading Christianity in the new world to be discovered. The contract was signed at Santa Fe, near Granada, April 17, 1492, the Queen providing the cost of the expedition, about $7000, out of which Columbus got a salary of $320. The broad river Odiel comes into the Rio Tinto opposite La Rabida, and a little way up this stream is Huelva, the chief town of the neighborhood, with a spacious harbor, the shipping port of the famous Rio Tinto copper mines, that have an output approximating a value of $20,000,000 annually. Here is preserved the log book made by Columbus on his voyage, his ships having been outfitted at the port, and in 1892 the four hundredth anniversary of the event was marked by unveiling a colossal monument by Velasquez. The Rio Tinto mines are about fifty miles up that river and are among the most valuable in existence. The Phœnicians and the Romans worked them, but they were but little used until 1872, when a syndicate of bankers bought them from the Spanish Government for $20,000,000. They occupy a large area, producing ores of iron pyrites containing a large proportion of sulphur and three to four per cent of copper. To the northwestward is another group of similar character, the mines of Tharsis. These Rio Tinto mines employ about ten thousand workmen, are served by sixty miles of railway both above and below

ground, and produce annually twenty thousand tons of copper, mostly going to England.

THE GREAT RIVER.

From the entrance of the Rio Tinto, the *Arenas Gordas,* a chain of sand dunes, extends along the Spanish coast, which gradually curves southeast toward the mouth of the broad Guadalquivir. Far back into the land stretch the *marismas* or salt marshes, with pastures where bulls for the arena are grazed, and in the dry time of summer the surface appears as a dark-brown heath. Through this monotonous region the river flows in three *brazos* or branches, but the navigation has been improved by canals which shorten the distance. These branches uniting, the river enters the ocean, having on the northern side of the entrance the village of Bonanza, named after the chapel of the "Virgin de la Bonanza," meaning "good weather." Across the broad river mouth is the busy port of San Lucar de Barrameda, where there are twenty-five thousand people. Both of these settlements are very ancient, and present relics of Roman and even earlier domination. San Lucar, however, did not grow much until after the American colonization began, and then its trade expanded. From here sailed in 1519 the Portuguese mariner Magellan, for his journey of wonderful discovery around the

world. There are outlying villas with orange groves and palm trees and defensive forts protecting the port, while upon the neighboring sand-dunes grow the vines that produce Manzanilla wine.

All of the region upon which we look in passing the Guadalquivir entrance is the famous Spanish province of Andalusia, the southernmost district of Spain, extending eastward from the Portuguese boundary for over three hundred miles along the shores of the Atlantic and the Mediterranean, and having a breadth northward of over one hundred miles. The name was originally Vandalusia, the "land of the Vandals." Celebrated for fertility and picturesque scenery, it is traversed throughout by high mountain ranges, enclosing the most beautiful valleys. Upon its pastures are raised the best horses in Spain, and the most prized bulls for the arena in the Spanish national sport of bull fighting. The ranges of mountains that traverse the province from west to east are the Sierra Morena, along the northern border, and the higher mountains of Granada and Ronda in the southeastern and southern regions, the most famous of these ranges being the Sierra Nevada of Granada, the "snowy mountain," the highest in Spain: a chain over fifty miles long and about twenty-five miles broad, its culminating summit being Mulhacan, elevated 11,420 feet; the Picacho de Veleta rising 11,385 feet, with other peaks exceeding 10,000 feet, all having their noble

crests above the perpetual snow line. Between these mountain ranges is the valley of the Guadalquivir, which drains them through its many affluents and thus becomes the main river of Andalusia. In the mountain chains both north and south of it are deep transverse valleys with rounded basin-shaped heads or *cirques* among the peaks. The northern slope of the Sierra Nevada falls off precipitously toward the river valley, making magnificent scenery. The Guadalquivir is about three hundred and fifty miles long, its vale having a small upper basin, of considerable elevation among the mountains, where it is formed by three streams in Jaen province, while the chief lower tributary is on its southern side, the Jenil, coming in from Granada. The lower course of the Guadalquivir is through a very broad valley. It passes Cordova and Seville, and then for fifty-four miles to the sea, flows through the lowlands of the *marismas,* a wide, level and to large extent unhealthy deposit of alluvium.

This river valley is one of the most ancient and famous in Spain. It was the province of Baetica in the Roman days, when they called the river the Baetis, and navigated it up to Hispalis, now Seville, and thence to their more remote settlement of Corduba now Cordova. They found it then, as now, the only Spanish river which at all seasons of the year is a full-bodied stream, being fed in winter by the rains, and in summer by the profusely melting snows

of the Sierra Nevada. The Vandals and the Visigoths came, overpowered the Romans, and settled in the fertile valleys of this noble river, the Visigoths holding it until the beginning of the eighth century, but in the meantime becoming enervated by too close contact with Roman luxury. Meanwhile, after the death of Mohammed, and the rise of the Moslems, that new religion had extended its wonderful power throughout the Mediterranean, and controlled all the African shores to the Pillars of Hercules. Anxious for further conquest, in 711, Tarik crossed the strait at the head of about five thousand Moors, and with ease and rapidity accomplished the overthrow of the Visigoths, defeating Roderick, "the last of the Goths," in a battle near Jeréz de la Frontera about fifteen miles southeast of San Lucar, on the Guadalete river. This town of sixty thousand people is now one of the wealthiest in Spain, its fortune being made from the exportation of Sherry wine, the name coming from Jeréz, which is pronounced "hereth." The battle fought southward from the town is said to have continued several days. The affix "de la Frontera," which is placed on several of these towns of Spain, was given later, in the fourteenth century, when they became Christian outposts in the long-protracted conflicts on the borders of the Moorish possessions. The chief shows of Jeréz to-day are the extensive Bodegas where the Sherry wines are stored,

and the vineyards around the place where they are grown, covering about three hundred square miles.

Tarik, after his victory, overran the Guadalquivir valley with little opposition, making himself master as far as Corduba and even crossing the mountains beyond to Toledo near Madrid. The full current of the river led the Moors to name it *Wadi-el-Kebir,* or the "Great River," and this for the subsequent five centuries was the central province of their Spanish possessions. They made the stream navigable for barges up to Corduba, which was their capital, but in the later period of neglect, the lower reaches became silted up, and it has only recently been canalised and deepened sufficiently for vessels of moderate draft to pass up to Seville. After the invasion of Tarik and the Moors had established themselves along the river, they quarrelled, and this enabled Abderrahman I to place his dynasty of the Omayyades in full control of the river in 756. It was this prince who in his constant warfare with numerous enemies was opposed by Charlemagne, who had sent an army into Spain to help them. But on its return through the Pyrenees, in 778, its rear guard was almost annihilated in the famous battle of the Pass of Roncesvalles, where Roland the Paladin, one of the great heroes of chivalry, was slain.

Thus began the famous Moorish dynasty that for three centuries made the Guadalquivir the chief seat of Moslem power in Spain, and Corduba, the

capital, its name gradually changing afterward to Cordova. The most powerful sovereign of this family was Abderrahman III, reigning in the tenth century, who advanced his title from Emir to Caliph, made Cordova one of the wealthiest cities of Europe, completed its noble mosque, the greatest of the Moorish era, and was one of the most potential rulers of the then known world. In his day the "Great River" is said to have had on its banks and in its extensive basin, eight large cities, three hundred towns and twelve thousand populous villages, while Cordova alone had two hundred thousand houses and six hundred mosques, and its caliph not only controlled Spain and Portugal, but through his powerful fleets was the master of the entire shores of the Mediterranean, and the Atlantic coasts of Europe and Africa. After this caliph's death in 961, his successors were weak men, and his caliphate split into factions, so that in the later tenth century there were three separate and generally hostile emirates in the valley, with their capitals at Seville, Cordova and Granada. Then came the era of the Crusades, under which the Christian dominion in Spain expanded, so that excepting at Granada, most of the Moorish power was destroyed, the whole lower river being conquered and taken from them in the latter half of the thirteenth century. But Granada was maintained as a Moorish stronghold for over two centuries longer by the dynasty of the Nasrides,

whose sovereign, Mohammed I, began the Alhambra in the thirteenth century. This kingdom had a compact Moorish population in a region easily defended by its natural advantages, and the dynasty conducted skillful diplomacy as between the Christian rulers of Spain and the Moors of Morocco and the Mediterranean. But Ferdinand and Isabella began the final war against them in 1481, and completed the conquest of Granada, January 2, 1492. Since then the Christian governing powers of Spain have controlled the "Great River."

SEVILLE AND THE CID.

Fifty-four miles up the river Guadalquivir, low-lying on its eastern bank, is Seville, the capital of Andalusia. The tawny river, discolored by the vast amount of alluvium its tinged current brings down from the mountains, divides the city from its suburb of Triana, on the southwestern bank, from time immemorial the home of the gypsies, and the location of the potteries for which Seville is noted, especially in majolica and plates with metallic lustre. The legend is that Saints Justa and Rufina, in the early Christian church, who were martyred because they would not sacrifice to Venus, had here a potter's shop. All the land surfaces are flat, but the surrounding district is very fertile, and the people proudly call it the land of Maria Santisima, while their houses are so comfortable that there is an old

German saying that "He whom God loves has a house in Seville." The city is generally a labyrinth of narrow streets, a Moorish heritage, but it is relieved by many open spaces planted with oranges, palms and other attractive trees. It is bright and gay, and always was popular, being regarded as preeminently the Spanish "city of the guitar, the fan, the song and fandango." It has a large representation of the careless yet attractive Bohemian class of southern Spain, who are said generally "to sleep on the steps of churches, breakfast on a glass of water, and dine on an air of the guitar." So marked was its ancient fame that Dante in the *Inferno* makes Odysseus mention only Ceuta and Savilla as seen by him when he passed the Pillars of Hercules. Like other Spanish cities, everything is clothed in dazzling white, the *blanquedor* or whitewasher constantly laboring upon the walls of the buildings and the curbs of the streets. The dwellings are mostly low and they follow the Moorish style of being built around open inner courts with arcaded borders, central fountains and marble pavements, having an awning above. The Seville summers are very hot, but the winter climate is delightful. There are one hundred and fifty thousand people in Seville and during the Moorish domination when at its time of greatest prosperity in Al-Motamid's reign in the eleventh century, it eclipsed Cordova, which had then declined, it had four

hundred thousand population, the walls having a circumference of ten miles, being pierced with twelve gates. A second era of great prosperity came after the discovery of America, when Seville was one of the chief Spanish ports and had been given the monopoly of the transatlantic trade. The two leading Spanish artists were born in Seville, Velasquez in 1559 and Murillo in 1617, and it was also the birthplace of Cardinal Wiseman in 1802, while in the Roman days, when it was a favorite home of the patricians, three emperors were born at Itabica in the suburbs, Hadrian, Trajan and Theodosius.

The escape of Seville from the great earthquake which demolished Lisbon, November 1, 1755, is commemorated by a procession on the anniversary, and by a monument in the chief public square, the Plaza del Triunfo, not far from the river. Fronting this square are its two greatest buildings, the Cathedral on the northern and the Alcazar on the southern side. The grand Cathedral of Santa Maria, the greatest church in the world next to St. Peter's at Rome, has its splendid front, the Capilla Real, rising from the square, flanked at the northeastern angle by the famous Giralda, the most conspicuous landmark, as it is the oldest and most beautiful structure in Seville. The Moors built here the great Mosque of Abu Yakub Yusuf, and the Giralda was its minaret or prayer tower. When the Christians drove the Moors out of Seville, they

made the mosque their cathedral. Then in the fifteenth and sixteenth centuries they built the present cathedral on the site of the mosque, preserving the Giralda. Various earthquake shocks having weakened the cathedral, a thorough restoration is now being accomplished. It is nearly four hundred feet long and two hundred and fifty feet wide, having a nave, double aisles, and two rows of side chapels, and in addition the fronting Capilla Real, ninety-two feet long and one hundred and thirty feet high, while the nave rises two feet higher. The entire area covered is 124,000 square feet. The magnificent Giralda, named from the Spanish word *girar,* "to turn round," referring to the *giraldillo* or weathercock surmounting it, is forty-nine feet square at the base, the walls being eight to ten feet thick, and was originally two hundred and thirty feet high, the upper walls ornamented with Arabesque-like sunken panels, niches and windows, that had been highly decorated. An embattled platform then crowned it with an iron standard and four enormous balls of brass, which the *muezzin* sounded for the prayer-calls. These were overthrown by an earthquake in 1395. Subsequently the tower was repaired, and a belfry built above with another tower on top, and capped with a small dome, on which stands the famous weathercock, three hundred and eight feet from the ground. This is a bronze female figure thirteen feet high and weighing over a ton, representing

Faith bearing the banner of Constantine and turning around to face every wind and storm. This celebrated Giralda, regarded as the most splendid tower in Europe, is under the special protection of Saints Justa and Rufina, depicted in one of Murillo's noted paintings in the Seville Museum.

The cathedral has five stained glass windows, and in the nave is the tombstone of Ferdinand, the son of Columbus, who died in 1540, giving the Cathedral Chapter his extensive library, still preserved, numbering thirty thousand volumes, many being printed books of that period relating to the discovery of America. It also contains the monument of Columbus, which was removed from the Havana Cathedral in 1899. In the Capilla Real in a silver shrine, is the body of St. Ferdinand III, King of Spain, the captor of Seville from the Moors after six months' siege, on St. Clement's Day, November 3, 1248, who died in 1252, and also the tombs of King Alfonso the Learned, who died in 1284, and his mother, Beatrice of Suabia. Upon the high altar here is the statue of the Vergen de los Reyes, given to St. Ferdinand by St. Louis of France, a figure with removable golden hair, and covered with splendid vestments, though the golden crown was stolen in 1873. The two keys of Seville captured by St. Ferdinand are in the Treasury — the silver key of the Moors — with the inscription: "May Allah grant that Islam may rule eternally in this

city"; and the iron-gilt key of the Jews, with the words, "The King of Kings will open, the King of the Earth will enter." There are also many paintings in the chapels by the great masters, among them Murillo's masterpiece, *St. Anthony of Padua's Vision of the Holy Child,* painted in 1656. In November, 1874, the kneeling figure of the saint was cut out of this canvas, and taken to America, where it was recovered in New York three months afterward. It has been very skilfully replaced in the picture.

The Alcazar, the residence of the Spanish sovereigns since the capture of Seville by St. Ferdinand, rises in embattled towers and massive masonry, a medieval castle on the southern side of the Plaza del Triunfo. Here was the Prætorium of the Roman days and on its ruins the Moorish kings had their palace or Alcazar, a huge citadel, the strongest fortification of the city, originally constructed for Abu Yakub Yusuf. Very little remains of his structure, however, the nucleus of the present one being built by Pedro the Cruel, otherwise called Pedro the Judge, in the fourteenth century, the most popular king of Seville, his surnames having been given according to the point of view of the observer. Within the Alcazar, Pedro murdered his brother Fadrique, and also his guest, Abu Said of Granada, the latter crime being committed to secure the Moor's valuable jewels. One

Alcazar, Seville.

of these, a large ruby, was given by Peter to the English Black Prince, and is now included in the regalia of the British crown. The Alcazar suffered from fires, was at various times enlarged, embellished and restored, and is to-day one of the great show buildings of Spain. Its "Court of the Maidens," a cloistered space about sixty feet square, adorned by exquisite Moorish arches, the fine façade of the Patio de la Montera, a richly adorned structure in the Persian style; and the "Hall of the Ambassadors," a magnificent room thirty-three feet square surmounted by a dome, are its chief adornments. On the walls of the latter are the portraits of the kings of Spain down to Philip III. The Alcazar has attractive gardens, and adjoining them is a vaulted gallery where Maria de Padilla, the morganatic wife of King Pedro, used to bathe. The chronicler of that time tells us solemnly that Don Pedro's courtiers displayed their gallantry by drinking the water. The Seville Museum has many paintings by the old masters collected from the ancient convents and now housed in the Convent of la Merced, which St. Ferdinand founded. The noted Seville University was established by King Alfonso the Learned in 1256, and was greatly enlarged in subsequent reigns.

Among the attractions of Seville are the famous church festivals which are part of the official life of the city and draw great crowds of visitors. The

chief festivals are at Corpus Christi, the Conception, on the three carnival days, All Saints' Day, Christmas, and during Holy Week. The culminating celebrations are during the latter period, the Semana Santa, when Seville is crowded to overflowing, and prices are high. There are magnificent processions of the Confradias, or Religious Brotherhoods, carrying through the streets gorgeously adorned statues of saints upon litters illuminated by many candles. In front are the soldiers, guards and gendarmes, followed by the brotherhood members wearing masks, white-robed girls, the town council and bands of music. The Lord Mayor of Seville reviews them as they pass the City Hall — the Señor Alcalde Presidente — and they proceed to the cathedral, large crowds witnessing the march. The first procession is on Palm Sunday in the afternoon, and others on Wednesday, Thursday and Good Friday, there being both an early morning and an afternoon procession on Friday. There are elaborate ceremonials within the cathedral. On Wednesday, the Velo Blanco, the "Veil of the Temple," is rent in twain with an accompaniment of thunder; the oil is consecrated on Thursday in the presence of the Cathedral Chapter, town council and other functionaries, with the "Washing of the Feet" in the evening. There are services throughout Friday, and early Saturday morning the Cirio Pascual is consecrated, a gigantic candle twenty-five feet long and weighing about eight

hundred pounds. The "Revelation of the High Altar" follows through the rending of the Velo Negro, accompanied by the Gloria in Excelsis with peals of thunder and the ringing of all the church bells. There is also a curious "Dance of the Six Boys," usually performed in front of the high altar, reproducing the Israelitish dance before the ark, the boys appearing in fantastic dress of the sixteenth century. The Easter music and solemn high mass attract an enormous congregation.

In the Chapel of Granada, alongside the entrance to the Seville Cathedral, are kept various relics, among them a huge elephant's tusk and the Lagarto, from which the cathedral entrance is named the Puerta del Lagarto, meaning "the lizard." This is a stuffed crocodile that was sent in 1260 by the Sultan of Egypt to King Alfonso the Learned, accompanying a request for the hand of his daughter. Here hangs also the alleged bridle of Babieça, the horse of El Cid, the national romantic and chivalrous hero of Spain, who appeared at Seville during the height of the Moslem power, in the reign of Motamid, to collect tribute for the king of Old Castile, Alfonso, and when El Cid came here he found Motamid in straits, for Abdallah the king of Granada had brought a large army against Motamid and was laying siege to the city. The chivalrous hero at once attacked Abdallah, defeated him under the walls of Seville with great slaughter, and re-

turned to his king Alfonso at Burgos, the capital of Old Castile, with many prisoners and rich booty. But Alfonso turned against him, El Cid was accused of attacking the Moors without authority, and of keeping back part of the Seville tribute, and was banished from Old Castile. Then began the great Spanish hero's picturesque and romantic life that has been described during subsequent centuries by an endless catalogue of minstrels, romancers and song writers, enveloped in myth and story, expanding with the lapse of time, until it has made him the impersonation of Spanish chivalry and renown, colored with marvellous attributes and achievements.

Rodrigo Diaz de Vivar, who thus became the most prominent figure in medieval Spanish literature, was born at Vivar, north of Burgos, about 1030, and as he became the foremost man of that heroic period in Spain and the greatest warrior produced in the long struggle between the Christian and the Moslem, his titles were given him by the Moors, *El Seid,* meaning "the lord," and *El Campeador,* or "the champion," for in a trial at arms by single combat, he had slain the enemy's champion. He served King Ferdinand I of Old Castile and his sons, in their campaign against the Moors of the Guadalquivir, and on Ferdinand's death was the champion of his son Sancho I. When the latter was slain, and his brother Alfonso aspired to the throne, El Cid made him take a solemn oath that he

was not his brother's murderer. This was in the Burgos church of Santa Agueda, where the king is said to have taken the oath three times; first by the cross at the entrance, then by the bolt (still preserved) of the church door, and finally by the gospels on the high altar. Alfonso at first demurred, until a knight exclaimed, "Take the oath, and fear nought; never was a king found guilty of perjury, or a pope excommunicated."

El Cid married Alfonso's cousin Ximena, and was his great military leader until the affair at Seville. Being banished, the hero then became a true soldier of fortune, fighting for one leader after another, now under the Christian banner, and now for the Moslem, but always for his own hand. He was bold and courageous, yet cruel and vindictive, and in many wars and contests, he finally captured Valencia, after nine months' siege in 1094, the richest prize that had been taken from the Moors down to that time. Upon this he founded an extensive kingdom in southeastern Spain, composed of Valencia and Murcia, which he ruled successfully for about four years, until the Moors came in great force and inflicted a crushing defeat, which had such an effect upon the war-worn and aged Cid, that he died of grief in July, 1099. His widow, Ximena, maintained her power in the city, which has since been known as Valencia del Cid, for a little while afterward, but was forced to abandon it. The min-

strels tell the romantic story of how she placed the dead body of her husband on his former war-horse Babieça, and thus passed in safety through the ranks of the terrified Moors who besieged the place. He had ordained in his last will that he should be buried in the convent of San Pedro de Cardena near Burgos, and thither the body was taken, and he and Ximena were buried there, surrounded by the graves of several companions in arms, while the faithful Babieça was buried near the gateway. Centuries later the Cid's bones were taken up and carried to Sigmaringen in Germany, but in 1883, with Ximena's remains, they reached their final resting place in the Town Hall of Burgos, which city acquires special fame as the home of the great Spanish hero. Babieça outlived the Cid, and in his will he wrote, " When ye bury Babieça, dig deep, for a shameful thing it were that she should be eaten by curs, who have trampled down so much currish flesh of Moors." This charger had great intelligence. When El Cid rode into Toledo on one occasion, with King Alfonso, Babieça dropped upon her knees before a Moorish mosque and would not stir. He had laborers called to search for a relic, and they had scarcely made a hole in the wall when a flood of light poured out of it. Searching a little further an extraordinary image was found in a niche with a lantern beside it, that had been burning without oil or wick, it was supposed, since before the Moslem

conquest, when this had been a Christian church. The mosque was again made a church and is called "the Christ of the Light," the image, which is still preserved over the altar, having real hair and a beard. There was an unsuccessful effort made by the Spanish king, Philip II, to have El Cid canonized as the impersonation of the heroic national life of Spain, but objection was made at Rome. All sorts of romances have been interwoven in his life during the centuries, and he is still invoked by good Spaniards in every national crisis. His fame has been sung by the Spanish minstrels for generations, in ballads full of the most extravagant laudation and mythical exploits, while not a few Spanish grandees are proud to know that his blood courses through their veins.

THE ANCIENT MOORISH CAPITAL.

The Guadalquivir comes to Seville from the northeast through a plain, from which in looking back at that city the great cathedral is seen to tower above the lower white buildings, as Gautier has expressed it, "like an elephant standing amid a flock of resting sheep." The river flows in a fertile valley, receives many tributaries, and among them about fifty miles from Seville, the sturdy Jenil coming westward with the ample tribute of the Sierra Nevada snows from Granada, this river being the Singibis of the Romans and the Shenil of the Moors. There

are rapids below the Jenil mouth, where old Moorish mills are located. Beyond, at some distance, rises high above the Guadalquivir the fine Moorish castle of Almodovar del Rio, with its detached tower on a hill, which King Pedro the Cruel is said to have used as his treasure house in the fourteenth century. About seventy-five miles northeast of Seville, the river makes a sharp curve at the base of the Sierra de Cordoba, a projecting spur of the Sierra Morena, and here at an elevation of about four hundred feet above the sea, on a plain sloping gently upward from the Guadalquivir, is the ancient capital of the Moors, the city of Cordova, with about sixty thousand people. But outside of the cathedral, the former mosque, which has been seriously defaced, there are few relics of that time. The public squares are small, the streets narrow and rough, the old walls in ruins, the houses low and whitewashed and the homes of the powerful nobles deserted, but Cordova still possesses its noble views of the mountains behind it and the splendid valley of the "great river" in front, to the southward.

The Moorish Omayyades of the Abderrahman dynasty in the eighth, ninth and tenth centuries, built its great mosque, or *Mesdjid,* still the most imposing monument of the Moorish domination in Spain, which made Cordova the Moslem Mecca of the West, and a city that was the home of students from all nations and among the greatest and wealth-

iest in Europe. This mosque was built on the site of a Roman temple, and was the *Mesdjid al-Djami,* or "chief place of prayer," their largest religious structure in Spain, and second in size to that of Mecca alone, among all the Mosques of Islam. When the Moors came they found here near the north bank of the river, the Visigothic Christian Church of St. Vincent, of which they got possession, and here Abderrahman I in 785 began the construction of the *Zeca,* or "House of Purification," made of ten rows of columns taken mostly from Christian churches and occupying about one-fifth of the site of the present building. These columns divided it longitudinally into eleven aisles, and transversely into twelve. The central aisle, somewhat wider than the others, had a short prolongation beyond the enclosing wall, forming the *Mihrab* or "prayer-recess." To this structure was added on the north the *Haram* or "Court of Ablutions" completed shortly after his death, and his successor Hisham I placed there a fountain, and also built the ancient tower for the *Muezzin,* or "prayer-crier." Every ruler afterward added extensions to the mosque, with more columns, aisles and adjunct buildings, and its growth attracted pilgrims from all parts of Islam, so that the population of Cordova was largely increased by accessions from Arabia, Syria and Africa.

The Caliph Abderrahman III did a great deal, and his successor Hakim II doubled its size so that

in the later tenth century Arabic writers, in admiration, recorded of this mosque that "in all the lands of Islam there was none of equal size, none more admirable in point of work, construction and durability." Then came Caliph Hisham II, who made further additions by adding more rows of columns, widening the structure, and about the year 990 it was practically completed with nineteen aisles, giving the profound impression of endless space to the visitor, as he gazed through the long vistas of apparently innumerable rows of columns.

The period of greatest magnificence in Cordova was during the long reign of Abderrahman Annasis Ledinallah, known as Abderrahman III, from 912 to 961. His seraglio is said to have numbered 6,300 persons and he was attended in the field by twelve thousand horsemen, "whose belts and scimitars were studded with gold." Gibbon, who records this, mentions a memorial the Caliph had written, which was found after his death, in which he spoke of his long reign "in victory or peace, beloved by my subjects, dreaded by my enemies, and respected by my allies. Riches and honors, power and pleasure, have waited on my call, nor does any earthly blessing appear to have been wanting to my felicity. In this situation I have diligently numbered the days of pure and genuine happiness which have fallen to my lot; they amount to fourteen. O man, place not thy confidence in this present world." The line of the

Omayyades of the Abderrahman dynasty became extinct in 1031.

St. Ferdinand captured Cordova in 1238, and the renowned mosque then became the Christian Church of the Vergen de la Asuncion. The space occupied is about 240,000 square feet, equal to that of St. Peter's in Rome, and is a rectangle five hundred and seventy feet long and four hundred and twenty-five feet wide, of which the mosque covers two-thirds and the large court one-third. An embattled wall thirty to sixty-five feet high, standing on ponderous terraces and having massive buttresses, surrounds it, there having originally been twenty-two gates, of which ten are still preserved, though there were none at any time on the southern side. Like most Moorish structures, the exterior thus is a mass of monotonous masonry looking much like a fortress. The gates were surmounted by decorated horseshoe arches and had bronze-mounted doors and knockers. The word *Deus* is inscribed in Gothic characters, with the Arabic inscription "the lordship belongs to Allah and his protection." The Bell-Tower, taking the place of the Moorish minaret, rises three hundred feet, having been largely reconstructed in the sixteenth century to resemble the Seville Giralda, and it is surmounted by a weathercock figure of St. Raphael, the patron saint of Cordova. From the top there is an admirable view over the city and its splendid surroundings of mountain and

river scenery. Within the enclosure the "Court of Ablutions" is now called the "Court of Oranges," its fountains, palms and orange trees giving an excellent representation of oriental repose, the rows of orange trees reproducing the nineteen aisles of the mosque in continuation, although the nineteen arched gateways are now reduced to three. There were various alterations made in the mosque that marred its symmetry and beauty, but it still resembles the older mosques, and though of moderate height, thirty-eight feet, and with much of the perspective vistas destroyed by the changes made, it gives the visitor the impressive idea in the subdued light, of an endless forest of columns. There are still over eight hundred and fifty columns standing, in marble, jasper, breccia, porphyry and other materials of diverse styles, and said by tradition to have been gathered from many churches in towns captured by the Moors, and brought from everywhere they made conquests, but the modern investigators have found that most of them came out of Andalusian quarries. They are about thirteen feet in height with a double row of arches between their capitals and the roof, the lower arches horseshoes, and the upper resting on slender pillars imposed on the columns, giving a singularly beautiful effect by the interlaced crossings above. The ornamented roof originally was open work made of larchwood, and the florid Arabic writers tell of the more than seven thousand lamps which

Court of Oranges, Mosque of Cordova.

hung from nearly three hundred chandeliers to light the interior, and the vast amount of oil consumed, saying, " The gold shines from the ceiling like fire; it blazes like the lightning when it darts across the clouds."

There were many alterations made in the mosque, involving the removal of large numbers of columns and the destruction of the superb Moorish ceilings when the changes came in the sixteenth century that then established a high-roofed church choir in the centre of the mosque, and these changes marred much of the elaborate beauty for which the structure was famous. The holy Mihrab, its axis directed toward the south, to face Mecca, is the culminating point in the decoration of all mosques. The earliest Mihrab is gone; the second is mutilated; but the third, built by Hakim II, is preserved and is the gem of the building to-day. This is a seven-sided, chapel-like structure, about thirteen feet in diameter, having a large vestibule (now the Chapel San Pedro) and two side rooms. The Mihrab became the sacristy to the chapel. The dome of this Moorish vestibule — now the chapel — is in the form of a pineapple, below which interlacing arches rest upon marble columns, brilliantly colored mosaics adorning the walls that also bear Arabic inscriptions. These mosaics were executed a thousand years ago by workmen sent with the materials from Constantinople, and they faded, but now are rather poorly

Interior of the Mosque, Cordova.

St. Raphael, is south of the cathedral, having in front Philip II's gateway, a Doric triumphal arch, the Puerta del Puente, leading to the ancient Moorish bridge across the Guadalquivir, its sixteen arches standing on Roman foundations. From this bridge there is a good view of the mosque, its sombre enclosing wall dominated by the high central church walls and belfry, with the noble background of the mountains to the northward. The road to Seville begins at the southern end of the bridge, which is protected by a massive fortified gateway. Cordova in the Roman days was the birthplace of Lucan the Stoic and of the two Senecas. The noted Rabbi Moses Maimonides was born here in 1139, and also the painter Pablo de Cespedes in 1538 and Juan de Valdes Leal in 1630. The famous "Gran Capitan" Gonzales of Cordova, the conqueror of Naples from the French in the late fifteenth century, was born at Montilla, about thirty miles southeast of Cordova, in 1453. He was one of the greatest Spanish generals at the time of the kingdom's highest power, and the leader of the armies of Ferdinand and Isabella, being active in the defeat of the Moors and conquest of Granada, and the negotiator of the surrender of Boabdil, their last caliph, in January, 1492. Farther eastward among the mountain spurs near Martos rises the steep precipice of the Carvajales. The tradition is that in the early fourteenth century Ferdinand IV ordered the brothers Carvajal,

unjustly condemned without trial for murder, to be thrown from this height. Before their death on August 8, 1312, they solemnly summoned the king to meet them at the judgment seat of God in thirty days. Ferdinand suddenly died one month afterward on September 7 and was consequently called *El Emplazado,* "the summoned," in later times.

CADIZ AND TRAFALGAR.

South of the Guadalquivir delta, the low Spanish shore made by its deposits protrudes to the westward, with hills in the background, the plain being largely occupied by vineyards and market gardens. Beyond these the Bay of Cadiz is deeply indented, and farther southward the Isle of Leon is separated from the mainland by a narrow channel. From this island there extends northwestward a long, narrow, rocky peninsula, broadening at its northern termination, and almost completely enclosing the spacious harbor of Cadiz, the city being built upon this peninsula. As the steamer moves along, the dazzlingly white city rises apparently from the water, like a castle in mid-ocean, surmounted by the dome-topped cathedral, and the entrance to the harbor opens to the eastward with forts dotted about on every defensive eminence. There are other ports upon the extensive bay into which the pretty river Guadalete, coming out of the hills past Jerez, empties. All of these ports are very ancient settlements, mostly an-

tedating the Romans. Among them is the Portus Menesthai and the Puerto de Santa Maria, devoted to fisheries and the wine trade, Portus Gaditanus, now Puerto Real, which deals in salt and has somewhat lost its ancient renown through modern eclipse, and within the bay old Isla de Leon, at present called San Fernando, and the chief Spanish naval station. To the southward of the latter, on an eminence, formerly stood the Temple of the Tyrian Hercules, a work of the Phœnicians which was highly venerated afterward by the Romans. All about the broad bay the low shores display lagoons and salt marshes, the landscape being decidedly Venetian, and dominated far away across the water as seen from every point of view, by "fair Cadiz rising o'er the dark blue sea."

Upon the rock of limestone, almost completely surrounded by the ocean, terminating the peninsula of the Isle of Leon, is the great seaport and naval station of Spain, the place of earliest Iberian settlement on the Atlantic coast. The powerful waves might wash it away were it not for the massive protecting walls about twenty feet thick and sometimes fifty feet high which buttress it all around. The origin is involved in the mystery of prehistoric times, but it is known that the Phœnician adventurers brought their tin and amber from the northern seas to this Tyrian Gadir or "castle," more than a thousand years before the Christian era. Carthage

got possession 500 B. C. and made a wealthy settlement here, equipping their fleets and armies. Then it became Gades and the Romans possessed it, the Tarshish of Scripture, the Greek writers marvelling at the great Atlantic tides, rising six to ten feet, a surprising daily change in level unknown to the Mediterranean. Cæsar and Pompey disputed for it, and in the days of Augustus it was famed for wealth and luxury, and became the exporting mart for the rich products of the fertile valley of the Guadalquivir. Then the barbarians came, it fell in decadence, and as the *Djezirat-Kadis* of the Moors it had little history, they making Seville and Cordova their chief ports and cities. Alfonso the Learned captured the almost abandoned settlement in 1262 and had to re-people it. The discovery of America and the "silver fleets of the Indies" restored it to some prosperity, and then the Barbary corsairs attacked it in the sixteenth century. Drake bombarded it in 1587, burning the shipping, and in 1596 Essex in reprisal for the Spanish Armada captured and plundered the town and destroyed thirteen Spanish warships and forty galleons in the harbor, causing ruin and a long bankruptcy. The English made several subsequent attempts at capture, being not then possessed of Gibraltar, but despite these attacks the enormous imports of silver from America poured into this "silver saucer," as the townsfolk called their city, averaging $25,000,000 an-

nually, restored prosperity, and in 1770 it was accounted wealthier than London. Cadiz has had various vicissitudes since and is now suffering from the rivalry of Seville, having considerably declined in the nineteenth century, but it still has much trade, and a population of seventy thousand, being one of the strongest fortresses of Spain.

The siege and capture by Essex in 1596 almost entirely destroyed the older town, so that nearly everything of antiquity is gone, and it has since been practically rebuilt, and excepting some narrow, crooked streets mostly adjacent to the cathedral, the Cadiz of to-day is modern. The chief impression is of the dazzling whiteness — a plaster of Paris city — all the buildings being covered with whitewash thickly bestowed, and one writer, De Amicis, in describing it asserted that the best impression would be given by writing the word "white," with a white pencil on blue paper to represent the water and sky. The flat-roofed houses are topped by *miradores* or view-towers, and the Spaniards followed the Moors in the methods of construction and in the lavish interior decoration with marble, and also quoting from the Moors they have likened their city to the "dish of silver." The restricted area of the peninsula has precluded either wide streets or large open squares and has also compelled the building of the houses higher than is usual in southern Spanish towns. The point of outlook is the Tavira, or Watch Tower,

in the centre of the city, rising one hundred feet above the elevated plateau, the signal station for the shipping, and giving a splendid view over ocean, bay and the distant eastern mountains. The new cathedral is modern, and not very large, being surmounted by a ponderous dome rising one hundred and seventy feet. The old Capuchin convent, now an insane asylum, has in its Church of Santa Catalina the last and one of the best paintings by Murillo, the *Betrothal of St. Catharine.* Before he had entirely completed it he had a fall from the scaffold resulting in his death in April, 1682, another artist giving the painting its finishing touches. In the Cadiz Botanic Garden is an attractive collection of sub-tropical plants, and a dragon-tree five centuries old.

It was from Cadiz that the Spanish fleet sailed out to fight the fateful battle of Trafalgar, October 21, 1805, and the tomb of its defeated Admiral Gravina is in one of the Cadiz churches. Southward from the city, the coast is generally low and trends toward the southeast to Cape Trafalgar, a sandy point guarding the northern side of the Mediterranean entrance. It terminates in two headlands and has a powerful lighthouse, visible for twenty miles at sea. This was the Roman Promontorium Junonis, and about twenty-eight miles across the sea, a little east of south, is the corresponding headland at the northwestern extremity of Africa, Cape

Cadiz.

Spartel, guarding the entrance on that side, the Promontorium Ampelusia, with an even more powerful light maintained on this Moroccan coast by the maritime powers of Europe, and having a sea range of twenty-five miles. The Moorish title of Trafalgar, from which its present name is derived, was *Tarf-al-agharr,* the " Cape of the cave," in allusion to a neighboring grotto.

In 1804, Napoleon was busily preparing for the invasion of England, collecting an enormous army at Boulogne in the winter of 1804–5 to cross the channel and land on the English coast under protection of his fleet, to which Spain, then in Bonapartist control, lent all its naval aid. But Lord Nelson crushed the combined French and Spanish fleets in the victory at Trafalgar, paying with his own life for a success which at that time destroyed the naval power of both France and Spain. For nearly two years prior to March, 1805, the French fleets had been bottled up by the English in Brest and Toulon. But during March the French Admiral Villeneuve escaped from Toulon, his mission being to join Gravina's Spanish squadron, cross the Atlantic to the West Indies, and then returning, relieve the other French and Spanish fleets blockaded in various ports, and go to the English Channel with a vast armada of over fifty ships of the line, so as to cover the crossing to England of the French invading army from Boulogne. Nelson had chased the

French ships in various directions but lost track of them for much of the time. Villeneuve and Gravina, after spreading terror through the West Indies, returned to Cadiz, anchoring in the Spanish harbor, where Nelson, who had been given the supreme command, soon found them, and he came outside Cadiz ready for the attack in September, 1805, with a fleet including thirty-three ships, Villeneuve and Gravina having about forty vessels, of which thirty-three were ships of the line. Nelson tried his best to get them to come out for a fight, and the situation became such that Villeneuve resorting to various expedients to avoid a battle, Napoleon finally stigmatized him as a feeble coward, and sent peremptory orders to him to go out and give Nelson battle, as everything depended upon it. Nelson kept most of his ships off shore so as not to be seen, and finally a false report coming to Cadiz that there were only twenty British ships in the offing, the French and Spanish fleets sailed out of Cadiz harbor, October 20.

Nelson planned to break the enemy's line at two points, by dividing the British fleet into two columns, the northern headed by himself in the *Victory,* and the other by Admiral Collingwood, in the *Royal Sovereign.* When the enemy came out from Cadiz they found a broad, crescent-shaped line composed of two rows of ships, the rear ships covering the spaces intervening between those in the front line. At daybreak on the morning of the 21st, Vil-

leneuve's fleet was sighted coming down the coast off Cape Trafalgar to engage the British. Nelson at once ordered his columns to advance toward the enemy, and deafening cheers broke from the British crews when he hoisted the famous signal on the flagship *Victory,* "England expects that every man will do his duty," a signal of which Southey said in his life of the hero, that it "will be remembered as long as the language, or even the memory, of England shall endure." It is said that Villeneuve when he heard the vigorous shouting was much affected by it, so that he lost heart before the combat began and exclaimed to his officers, "All is lost." The *Royal Sovereign* being the swiftest sailer, Collingwood's ship advanced ahead of Nelson's, and also of the rest of the fleet, and became the first engaged, penetrating the centre of the enemy's line. As Nelson saw this, he pointed to the advancing ship, and said, "See how that noble fellow Collingwood carries his ship into action." Almost at the same instant a remark of Collingwood's to his captain was recorded, made as if in response to that of his commander, "What would Nelson give to be here?" The valor and skill shown by Collingwood had a powerful influence. His ship closed with the Spanish Admiral Gravina's flagship, the *Santa Anna,* pouring in such rapid and unerring broadsides that she was on the eve of striking almost before another British ship had fired a gun. Several of her con-

sorts seeing the peril of the Spaniard came to her assistance and hemmed in the *Royal Sovereign* on all sides, but the latter was soon relieved by the more tardy squadron coming up, and then the *Santa Anna* struck her colors. The French and Spanish line was quickly pierced, most of their ships scarcely firing a shot. Divided, scattered and overpowered at every point, the allied fleet was soon a disabled and helpless mass of fragments, pursued by the conquerors. It was one of the most crushing naval defeats in history, almost two-thirds of the allied fleet being either destroyed or captured, and the French and Spanish navies were for the time swept from the ocean. But in his hour of greatest triumph, Nelson was killed. A musket ball fired from one of the *Redoubtable's* tops, with which ship the *Victory* was engaged, inflicted a mortal wound on Nelson about an hour after the battle began, and toward evening, he died. Thus cut off in his prime, at the early age of 47, the death of the greatest naval hero England had produced, caused a profound sensation. His remains were taken to London and interred in St. Paul's Cathedral the following January, and as a superb memorial the Nelson Column, bearing his statue, and guarded by the four famous British lions, was erected in Trafalgar Square in the heart of the English capital.

A few days before the battle Nelson planned it practically as it was fought, writing a "General Memorandum," which was given to his ship captains.

The original draft of this famous document in Nelson's handwriting came into possession of Admiral Munday, who prior to his death gave all his papers to his valet in an old desk, which the valet in turn bequeathed to his son, a London omnibus driver. In October, 1905, the Trafalgar Centenary was celebrated in England, causing much talk, and a passenger on the omnibus happened to ask the driver a question about Nelson, which drew the answer that he had a letter which Nelson had written. The passenger asked to see it and offered $50 and a suit of clothes for it. The wary driver, however, did not sell for that, but talked to other passengers, the result being that he had it offered at Christie's auction in London and in March, 1906, it was sold there for $18,000, and it is understood will go ultimately to the British Museum. The log of Nelson's ship *Victory* thus recorded his death on October 21, 1905: "Partial firing continued until 4.30, when, a victory having been reported to the Right Honourable Lord Viscount Nelson, K. B., and Commander-in-Chief, he then died of his wound." Nelson is regarded by the people of England as the greatest of the nation's heroes. Sir Cyprian Bridge said he was "the only man who has ever lived, who by universal consent is without a peer." Lord Roseberry said, "There is no figure like his among those who have ploughed the weary seas," and that he is "the greatest of our heroes and the dearest to ourselves; we

feel this in the marrow of our bones though we cannot so readily explain it." Captain Mahan, the American naval authority, has written that he is "the embodiment of the sea power of Great Britain."

The result of this crushing blow of Trafalgar was that Napoleon abandoned his project for invading England. This wonderful military genius then conceived the idea of taking the army he had gathered at Boulogne, and by quick movement crossing the Rhine and attacking his enemies of Russia and Austria. On December 2, 1805, he confronted them, commanded by their emperors, on the field of Austerlitz in Moravia, each side having about eighty thousand men in this noted conflict, often called the "Battle of the Three Emperors." In the early morning the "Sun of Austerlitz" shone brightly over the battlefield, giving Napoleon a good omen, of which he often afterward spoke; he completely defeated the allied army, and enforced a treaty of peace which was thoroughly disastrous to Austria.

ENTERING THE GIBRALTAR STRAIT.

Beyond Cape Trafalgar, the Spanish coast trends to the eastward, behind the shallow Barbate Bay, while farther east the interior land surface rises in the hills of the Sierras de la Luna, and de los Gazules, which become almost mountains. The coast is almost entirely treeless, but dotted by numerous *atalayas*, the ancient watch-towers, put here by the

Moors, and later by the Spaniards to spy out the invading forces so often coming over from Africa, the coast of Morocco now being in full view. The mountain chain projects in the Punta Marroqui, the southernmost point of Europe, while far away over the water, in Africa, are seen the white houses of Tangier off to the southwest, fringing a pleasant, curving bay. At the base of the Punta Marroqui is the ancient Moorish town of Tarifa, its fortifications obsolete and in partial decay, with a picturesque Moorish castle on the point, and a guiding lighthouse. Here the Moors levied revenue from vessels passing the Strait of Gibraltar, the Spaniards continuing this toll until the result of protracted wars abolished the dues. From the name of Tarifa and its tribute levy is derived the significant word "tariff" now in such general use.

Rounding Tarifa the steamer is within the strait, and the Spanish coast then trends northeast toward the bay of Gibraltar, the African coast running almost parallel, and the passage between them being about eight miles wide at the narrowest point between Tarifa and Siris in Africa, to the southeast. High hills are behind both shores, and the navigation between is generally difficult, on account of the eddying, changeable winds from the land, and the strong currents. The surface water always flows from the Atlantic into the Mediterranean and often with a speed of five miles an hour. The current beneath is

more salt and heavier, having its set westward. The Gazules hills rise on the northern shore, while on the African side are the Sierra Bullones, higher hills culminating in the famous hill of Abyla, elevated 2,710 feet. Rounding the Punta Carnero into the Bay of Gibraltar the gigantic Rock comes into full view. Thus we see the "Pillars of Hercules," the Calpe of Europe and the Abyla of Africa, about twelve miles apart, the ancient guardians of the Mediterranean, westward beyond which was then the land of the unknown, but now the gateway to the wonderful scenery and wealth of the Orient. Dante described this gateway as

> The straight pass where Hercules ordained
> The boundaries not to be o'erstepped by men.

THE FORTRESS AND THE PALACE

II

THE FORTRESS AND THE PALACE

The Mediterranean Sea—The Rock of Gibraltar—The Neutral Ground—La Linea—Gibraltar Town—Algeciras—The Rock's Defences—Its History—Its Fourteen Sieges—The Great Siege—Old Eliott—The Final Attack and Repulse of September, 1782—The Fortress To-Day—Ronda—Bobadilla—Malaga—Antequera—The Jenil—Loja—Alhama—Illora—Pinos Puente—Santa Fé—Granada—The Darro—The Albaicin—The Alhambra Palace—The Alcazaba—The Alameda—The Generalife—Attractions of the Alhambra—Charles V's Palace—Granada Cathedral—Downfall of the Moslems—Boabdil's Flight—Last Sigh of the Moor.

THE ROCK OF GIBRALTAR.

Thou art the Rock of Empire, set mid-seas
Between the East and West, that God has built;
Advance thy Roman borders where thou wilt,
While run thy armies true with his decrees,
Law, justice, liberty — great gifts are these.
Watch that they spread where English blood is spilt,
Lest, mixed and sullied with his country's guilt,
The soldier's life-stream flow, and Heaven displease!

In the olden time, the peoples living on the shores of the Mediterranean believed their great inland sea was the centre of the universe. They knew it was the centre of the earth for them and hence came its name. The Phœnicians, Greeks and Romans had

gradually extended their explorations and voyages over the neighboring and even more distant regions of land and water, and this confirmed their belief, especially as their erroneous astronomical theories made the sun, moon and stars all revolve around the earth, of which this great sea was the centre. The Mediterranean extends from Gibraltar at the west to Syria at the east, about twenty-one hundred miles, with a varying width of two hundred and fifty to five hundred miles, the coast being much indented by auxiliary seas and bays, and it covers a surface of about one million square miles. The shallowest depth is off the entrance fifty miles west of Gibraltar, where a ridge extends across from Spain to Africa, less than two hundred fathoms beneath the surface. This ridge falls sharply off westward toward the Atlantic, but eastward slopes more gently, reaching a thousand fathoms depth about one hundred and twenty miles east of Gibraltar, and sixteen hundred fathoms off the coast of Algiers. The deepest water is in the widest portion of the sea, between Malta and Crete, the maximum depth being twenty-one hundred and fifty fathoms. The Mediterranean waters are heavier and much salter than the Atlantic, as the extreme dryness of the atmosphere over the sea promotes evaporation, while the amount of fresh water contributed by the rainfall and the inflowing rivers is comparatively small. The evaporation is estimated as being at least double these supplies, and it

constantly tends to reduce the level of the surface, thus producing the strong inflow current of lighter and less salt water through the Strait of Gibraltar, preserving both the level and the relative salinity of the Mediterranean waters. The tidal changes are small, unlike the large tides in the Atlantic. The vast body of water in that extensive sea, which in reality ranks as an ocean, has a controlling influence in preserving the equalization of temperature on the adjacent shores.

Guarding the entrance to the Mediterranean stands the huge rock of Gibraltar like an enormous recumbent lion crouching on the sea, with his head pointed northward toward Spain. This is the greatest fortress in the world, and for more than two centuries has been held by England. To the arriving visitor, coming in from the Atlantic, the dark gray rock, while rising majestically from the water, presents a bare and almost barren aspect, especially when the summer suns have dried up the verdure. Nearly three miles long, it is outlined against the blue sky, with the standard of England flying from the topmost ridge. But on nearer approach there is disclosed a considerable covering of verdure, with here and there a grassy glen giving shelter to a group of trees, and luxuriant gardens surrounding some of the villas nestling at its base. In January and February, gladdened by the rains, portions of the enormous rock present a charming sight from the profusion and

beauty of the wild flowers. Many visitors have admired and described it. Thackeray said it was "the very image of an enormous lion, crouched between the Atlantic and the Mediterranean, and set there to guard the passage for its British mistress." The German Kaiser William on his visit in March, 1904, had his first view of the rock, and said it quite reached his expectations, adding, "It is grand, like everything English; I am not surprised that Gibraltar is impregnable"; and the Kaiser made a second visit in March, 1905.

The famous Rock is a long and comparatively narrow peninsula projected almost due southward, between the Mediterranean on the eastern side, and the bay of Gibraltar or Algeciras on the west. It is only about three-quarters of a mile broad at the widest part, and is almost entirely surrounded by water, being united to Spain by a flat sandy isthmus less than two miles long and only a half-mile wide. To the south, adjoining the Rock, this isthmus is British territory; then the fortified line of outer defence is constructed across, beyond which northward is the "Neutral Ground," extending about sixteen hundred feet between the British and Spanish frontiers, and adorned by rows of sentry boxes, occupied by the respective outposts. To the northward, on this border line, is the undefended and somewhat straggling Spanish frontier town of La Linea de la Conception, whose population cultivate the vegetable gar-

dens supplying Gibraltar, and also provide laborers for the post. Stretching along the Bay of Gibraltar on the narrow surface at the base of the Rock, at its northwestern and western sides, is the town of Gibraltar, and here is being constructed the elaborate new harbor and dockyard for the post. At the northern verge of the town on an elevation is the old Moorish castle, the earliest defensive work of the noted fortress, dating from the eighth century, and having a charming outlook. Out in front of it and far below, among the cemeteries, camps and gardens on the lower ground, and starting from the harbor's edge, runs due northward the "Road to Spain," a highway with a history covering a dozen centuries. The Bay of Gibraltar to the westward of the Rock is a curving inlet from the sea about seven miles long and four to five miles wide, but only an indifferent harbor, being exposed both to southwest and easterly winds, so that the Gibraltar post has to be protected by artificial breakwaters and moles. Across this bay is the white town of Algeciras, the Moorish *Al-Gezira-al-Kahdra* or the "Green Island," nestling under the foothills of the Sierra de los Gazules. Algeciras came into prominence in 1906, the Moroccan Conference of the European Powers meeting there in the spring, which on April 7 signed the convention that arranged for the policing and control of that disturbed country. In front of the town is the ancient "Green island," now the Spanish *Isla Verde*. There are some Moor-

ish survivals in this settlement, which was among the earliest made by the Moslems in Spain, but various wars practically destroyed the place, and two centuries ago it was repeopled by Spaniards, who left Gibraltar upon the English occupation. The greater port of the Gibraltar Rock, however, has entirely eclipsed it, and now it has no trade to speak of, excepting a small export of cork from the adjacent forests. To the eastward of the Rock is the broad Mediterranean, and to the southward, off its termination at Europa Point, is the Strait, and twelve miles away, but in full sight, the African coast and its hills culminating in the other Pillar of Hercules, now called the Hill of Apes. Gibraltar has a good trade, and is the popular port of call for Mediterranean shipping, several thousand vessels passing annually.

The basic rock of Gibraltar is for the most part a construction of Jurassic grayish white limestone of compact texture. Above the limestone are a series of dark grayish blue shales, with veins of sandstone and limestone, breccia and beds of sand. The geological theory about it is, that anciently it formed part of an isthmus connecting Europe with Africa, with long periods of elevation and depression, the final depression having produced the present intervening strait. Like all limestone formations, the Rock is honeycombed with caverns and subterraneous passages, so that it has been given also the popular title of the "Hill of Caves." This peculiarity of

formation has been availed of in the construction of galleries for defence of which there are many miles within the rock, and particularly at its northern end facing toward Spain. The Rock rises in a longitudinal ridge, elevated at the north in Mount Rockgun, 1356 feet, on the lion's head, then having an intervening lower saddle, and to the southward *El Hache,* the signal station, 1295 feet, and the highest point, 1396 feet, and finally at the southern end of the ridge O'Hara's Tower, 1361 feet high, where it falls off to a plateau, and then a lower level terminating in Europa Point. The northern face toward Spain and the eastern side toward the Mediterranean, are almost vertical precipices needing no special defences, as it is apparently impossible to scale them, though the northern face is elaborately protected by the extensive galleries making that front bristle with cannon pointing over the " Neutral Ground," and thus defending the town and post from an attack. The southern and western sides descend more gradually in step-like terraces. Cactus plants overrun many of the slopes, and here live rabbits and some Barbary partridges, while a troop of a score or two of little Barbary apes or Magots have made their homes on the Rock and are said to be the only wild monkeys in Europe. These little pets are highly prized and carefully protected, and the rare case of a birth among them is duly chronicled in the society intelligence of the newspapers. So greatly esteemed are

they that the Gibraltar proverb is "Better kill the Governor, than the 'Major,'" who is their venerable chief.

The Rock is defended in the most elaborate way and is regarded as thoroughly impregnable. There are mounted in its casemates and batteries over two thousand guns, including the heaviest and most powerful cannon of modern construction, some of which are placed upon the highest elevations, whence they can bring to bear in action, a plunging fire down upon the decks of attacking ships; and having a range of eight or ten miles, the weakest part of the most powerful armored battleship is thus at the mercy of the gunners. In addition, the harbor and dockyard improvements are making Gibraltar an auxiliary naval station of the first class for the reinforcement of the fortress in controlling the passage of the strait. The garrison in peace is five thousand to six thousand men, but in time of war the numbers can if necessary be greatly enlarged, for there are stores and water-cisterns ample to supply a hundred thousand men for over two years. The guns bristle at the base and all about the upper parts of the huge Rock, while ample batteries defend Europa Point, the southern termination, which is crowned by a lighthouse. This "Key to the Mediterranean" is a fortress, winter-resort, town and seaport combined, controlling the passage to Egypt, the Levant and the Orient, and the important traffic of the Suez Canal.

The town has narrow streets and crowded houses, terraced up the slopes of the Rock, to a height of nearly three hundred feet above the water, and developing into the attractive villas of its southern suburb, where the balmy air favors the growth of shrubbery and flowers, decking the window-sills, nodding over the walls, and climbing up the cliffs around the casemates of the guns. There are huge oleanders and cactus plants, tall hedges of geranium and heliotrope, and almost all the time a delicious bloom and fragrance. The Alameda, the only parade ground, though restricted, occupies a good deal of surface and has attractive gardens. There is in the town a development of all nationalities, with relics of the Moorish rule, though it has a distinctively Spanish aspect. British soldiers in bright scarlet jackets and little nobby caps hanging jauntily on the side of the head, brawny Highlanders in kilts, and numerous yellow-slippered, bare-legged Moors with brilliant turbans and loose flowing costumes, and Portuguese and Spanish donkey drivers predominate and color the scene. Mounting to the top of the famous Rock, there is a gorgeous view. To the southwestward over the water, the ocean meets the sea where the distant Punta Marroqui protrudes beyond the hills at Tarifa, while southward beyond the strait are the distant coast and hills of Africa, far away. Nearer, across the western bay, the white cottages of Algeciras nestle along the shore with the Gazules hills behind

them, and the railroad going out to the northward that is the traveller's route into Spain. The harbor works and quays and shipping are at one's feet, and northward to the right, the little town of Gibraltar fades away past cemeteries and gardens into the Neutral Ground with its distant rows of sentry boxes for the outposts, and the white village of La Linea beyond. Then the Spanish Mediterranean shore runs off to the far northeast, with the distant ranges of mountains culminating in the snowy outlines of Spain's highest peaks, in the far-away Sierra Nevada of Granada. The limitless Mediterranean spreads to the horizon eastward, and all about its surface are dotted moving vessels, the steamers leaving long trails of black smoke to mark their paths.

HISTORY OF THE FORTRESS.

With the dawning of historical records the Phœnicians came here and made their settlement of Calpe in what is now the Bay of Gibraltar, while the Carthaginians were also known in this region anterior to the Christian era, but the locality got its first fame, and the Rock its name, from the Moorish invasion of 711, their earliest appearance in Spain. *Musa,* the African viceroy over in Mauritania, of the Caliph of Damascus, sent across the strait a plundering expedition under the Arab *Tarik ibn Zijad,* landing near Algeciras. From this the Rock was given the name of *Jebal al Tarik,* the "hill of Tarik," which has

been gradually changed to Gibraltar. Two years later Tarik built the first defensive work on the Rock, and it was extended and strengthened during a score of years subsequently, making the present somewhat battered Moorish castle in the town of Gibraltar. For six centuries the Moors held it, enlarging the fortifications and defensive walls, and it was first captured by the Christians in the reign of Ferdinand IV, who held it twenty-three years, when the Moors recaptured it in 1333, and were again in possession more than a century. Duke Guzman of Medina Sidonia, the district to the northward, ousted them in 1462, and it was afterward a Spanish possession. The Algerian pirates attacked and plundered it, but the Spaniards greatly strengthened the works in the middle of the sixteenth century, extending them to the crest of the Rock. Prior to the eighteenth century it had undergone ten sieges and seen many masters, and then it came under English control. The long "War of the Spanish Succession" had begun, in which England had taken the side of an Austrian archduke, proclaimed as king Charles III of Spain. In this contest, Admiral George Rooke in 1704, had taken an English fleet into the Mediterranean, in conjunction with Dutch allies led by Prince George of Hesse. After cruising about and accomplishing little beyond landing Charles on Spanish soil, the Admiral got the idea of trying his hand on Gibraltar. There was a small Spanish garrison of about

one hundred and fifty men when he came along and practically surprised them, and they made a good though brief defence against overpowering numbers. After he had in this eleventh siege thrown about fifteen thousand cannon shot at the works during two days, and occupied the town, they surrendered, and Rooke took possession for Charles III on August 4, 1704. His opponent, Philip V (who ultimately succeeded to the Spanish throne, the war ending in 1714, by the failure of the adherents of Charles), no sooner heard of this British occupation of Gibraltar then he sought to recapture it, and thus began the twelfth siege in 1704–5.

The combined forces of France and Spain were sent against the Rock with a large army and fleet, and the attack was begun by a desperate attempt to scale it. The tremendous cliff on the eastern face toward the Mediterranean rises almost sheer from the water, over twelve hundred feet. There is indented here near the northern extremity of the Rock the shallow Catalan Bay, which was lined with fishermen's huts, and their boats landed on a narrow beach. This part of the cliff has never been fortified, but at that time a Spanish goatherd had found a steep and tortuous path from the beach, up which he offered to lead a storming party through the clefts and fissures to the top of the Rock, and five hundred men volunteered for the attempt. They prepared for the desperate enterprise by solemn religious

services, partook of the sacrament, and bound themselves by oath to capture the fortress or perish in the attempt. The start was made at night, in darkness and silence. They toiled up the face of the cliff by a zigzag route, going gradually higher and south from the bay, until they reached St. Michael's Cave, at an elevation of nearly eleven hundred feet. This cave opens toward the eastward and is the largest of the stalactite caves on the Rock, being nearly three hundred feet long and sixty-five feet high, and it is almost under the highest part of the crest of the Rock, and is south of the surmounting signal station. Here they lay concealed until daybreak, when they sallied out, and part of them mounted to the top, surprising and killing the guard at the station. With ropes and ladders they then aided the others to ascend and stormed the wall which the Spaniards had earlier built from the town on the western side up to the hill-crest. By this time, however, the English garrison was fully aroused and the grenadiers from below came rushing up the hill. They were met by a galling fire and many fell, but reaching the top they charged with fury upon the invaders, killing a large number, and forcing the others over the precipice where they fell into the sea. The Spanish commander and two hundred men were taken prisoners, including the wounded, and the others were either killed or drowned. This was the first and last attempt to take Gibraltar by scaling the Rock. This

siege continued six months, but was abandoned after a loss of ten thousand men. The Peace of Utrecht in 1714 ended the "War of the Spanish Succession," leaving Gibraltar in English possession.

Another war broke out, and another siege began in 1727, the thirteenth of the series, a Spanish force beleaguering the Rock for five months with twenty thousand men but without success, and the treaty of Seville ended that conflict in 1729, with the fortress still held by the English. There were no further conflicts involving it during a half century, until 1779, when what is known as the "Great Siege" began, continuing nearly four years and ending as the others, in English success. It is a fact regretted to this day by many in England that the original possession of the fortress was tarnished in title, as it was taken ostensibly for the Austrian Prince who claimed to be "His Catholic Majesty of Spain," and as Spanish property, which when the claim was abandoned, ought possibly to have reverted to Spain. The post was but lightly defended in those days, and the English premiers at home did not seem to value it much, for twice during the conflicts of the eighteenth century they proposed to return Gibraltar to Spain in recompense for that country not continuing the alliance with France, and the second of these rejected proposals was an English effort by the gift of Gibraltar to prevent Spain ceding Florida to France at Napoleon's behest. To-day, however, the

British statesman who would seriously propose giving up Gibraltar does not exist, the determination being constantly emphasized that the holding of the Rock is essential to British supremacy. The London *Times* says: "That watch-tower we still hold. Its enforced surrender would be the doom of our sea-power, and even its voluntary exchange, except on terms of overwhelming strategical advantage, would be something like an act of political insanity." Yet to this day Gibraltar is claimed by the sovereign of Spain as part of his dominions, though recognized as "temporarily in the possession of the English," and all persons born on the Rock are entitled to the privileges of Spanish subjects. England rules Gibraltar both as a military post and as a colony, with a Governor, and the pleasant fiction of the "temporary possession" is carried out by various ceremonial visits between that official and the Spanish functionaries across the "Neutral Ground."

THE GREAT SIEGE.

The severest test to which the English possession was ever put was in the "Great Siege" beginning in 1779. The French alliance with the American colonies, and Burgoyne's surrender at Saratoga in 1778, prompted the attack, Spain then being at war with England. But the fortress, unlike previous occasions, had a strong garrison of over five thousand men, with ninety-six cannon and a manly Governor,

George Augustus Eliott, born in Roxburghshire in 1718, a veteran in the military service, who had been given command of the Rock in 1775. He was sturdy and rugged and was familiarly called "Old Eliott"; and to his skill and resource, much of the vigor and success of the long defence were due. In June, 1779, by order of the king of Spain, all intercourse with Gibraltar was cut off, but matters lay dormant for months. The Spanish plan was to starve out the garrison, so they built a rampart across the "Neutral Ground," preventing access by land, and sent a large fleet to maintain a blockade. They could readily shut off supplies by land, but found it difficult to do so by sea, the Rock having a circuit of seven miles and many adventurous craft taking advantage of fog and darkness could get in under cover of the guns with provisions. The blockade, however, worked so well that the garrison soon were on very short supply and food prices in the town became high. Hunger was the rule, but the noble old Governor shared all the privations of his men, and on one occasion actually lived for eight days on four ounces of rice daily to show them what he could do, taking neither meat nor wine. The blockade had continued until January, 1780, before the garrison had their eyes gladdened by succor from a British fleet. This squadron had defeated the Spanish fleet which went out into the Atlantic to meet the enemy, and could the British

ships have remained at Gibraltar the siege might have ended. A large supply of stores was landed, but the fleet had to sail away for service elsewhere, taking home to England a large company of women, children and the sick. Then the Spaniards got their warships together again and renewed the blockade more completely than before. But "Old Eliott" had learned a lesson; with the opening season of 1780 he set his troops at work cultivating every available patch of soil on the Rock and thus raised needed vegetables, so that afterward they were not so near the starvation point, though illness caused by the meagre diet put many in the hospitals, and there were also serious attacks of smallpox and scurvy, from the excessive use of salted meats. Just then a Dutch vessel loaded with oranges and lemons came out of Malaga, and a bold boat's crew capturing her, the cargo of fruit distributed in the hospitals was ravenously devoured, and the sick were cured. Thus matters continued until the spring of 1781, when England sent another fleet, convoying merchant ships, with supplies, arriving in April and again giving relief from the impending starvation.

This second succor roused the Spaniards, and convincing them that they could not hope to reduce Gibraltar by blockade, they decided upon a bombardment. Extensive batteries had been placed along the adjacent bay shores, with some two hun-

dred and fifty cannon and mortars mounted, and a terrific firing began and was continued six weeks, with only two hours' intermission in the twenty-four. The cause for the two hours of silence is interesting. No Spanish gentleman under any circumstances can be deprived of his noontide *siesta*, that being the national custom before which even war necessities must yield. The cannonade began at daybreak and continued till noon — then the gunners went to sleep, and at two o'clock they woke up and began firing again, continuing until nightfall. The mortars then took up the fusillade until daybreak, for as they need not be aimed accurately they could be worked in the dark. Thus the booming roar of the guns continued, the town was soon burnt, and the garrison were in constant peril, bombs exploding at the casemates, and the soldiers kept busy dodging shells, of which dozens at a time were shrieking through the air. The Spanish vessels sailed around Europa Point each night, and gave it a deadly fusillade. The British troops were shelled out of their quarters and their families had to abandon the town and the settlements on the Point, and they sought refuge in caves and fissures, behind rocks and in tents. Besides the hail from the guns, terrific rain-storms also poured down upon them, for it was the wet season, and they had a most forlorn time. But these ills were not without their compensations. The rains replenished

their water supply, and the gales occasionally cast a Spanish ship on the Rock, an abandoned wreck, which gave them supplies and what was sadly needed, fuel for the camp-fires. "Old Eliott" was everywhere encouraging the disheartened and sustaining the spirits of his men.

There was not much reply made to the terrific bombardment, for the brave commander, always anxious to husband his resources, saw that it was useless and only a waste of ammunition. The Spaniards therefore relaxed the intensity of their fusillade, which had made no serious breach, and organized an assault. They had been over two years at the siege and the Rock still defied them, so they constructed by prodigious labor a stupendous parallel across the "Neutral Ground," built of heavy timbers and other materials, to cover an attack which was to be aided by their heaviest guns. "Old Eliott" had watched this rampart gradually creep across the isthmus and knew what was intended. Soon he made up his mind that affairs were getting ripe for an offensive movement on his part. About this time a couple of discontented Walloons from Belgium, who were in the camp of the besiegers, deserted and managed to get within the English lines. They were brought to the Governor, and he found one of them very intelligent. Going with the man to an outlook on the Rock where they could look down into the Spanish camp,

"Old Eliott" questioned him. The deserter told the Governor that the parallel was nearly completed, and the Spaniards were planning an assault, but just at that moment, the construction being unfinished, it was sparsely guarded, the enemy not imagining it would be attacked. This information decided the Governor upon instant action. He had the deserter confined so no one could talk with him, and called his lieutenants together, ordering an attack made that very night. At midnight two thousand men were under arms on the Alameda, then called the "Red Sands," each having "thirty-six rounds of ammunition, with a good flint in his piece, and another in his pocket." Only two drums were to go with each regiment, and no volunteers, as he did not want any inexperienced men; "no person to advance before the front, unless ordered by the officer commanding the column, and the most profound silence to be observed." It took nearly three hours to get all in readiness.

About three o'clock on the morning of November 26, 1781, the moon having just set beyond the western bay, and all being dark and still, the march began, led by two famous regiments that twenty-two years before had fought together in the battle of Minden, Westphalia, defeating the French in 1759. When the troops emerged from the town, they had about three-quarters of a mile to go across the isthmus to reach the enemy's works. It was

not long before their tramp was heard by the Spanish sentries, and a few desultory shots told they had been discovered. The advance was quickened; in a very few minutes they were at the Spanish works; and it was an almost complete surprise. They rushed over the parapet, bayoneting the few Spaniards who did not flee, and spiked the mounted guns. At once the parapet was set on fire, for which they had brought a mass of inflammable material. "Old Eliott," who was in the van, got anxious about the Spanish wounded in the works, for the flames were mounting high, and he personally brought out a mortally wounded officer whose guard at a battery had run away, but the Spaniard demurred at the rescue, saying he would die at his post, and in a few moments expired. Within an hour the whole of the parallel was wrapt in flames, brilliantly illuminating the isthmus and the Rock, and then the Governor ordered a retreat. As the English returned within their gates the Spanish powder magazines exploded, and the flames spreading, devoured their camp, the fire continuing four days, the bewildered besiegers not knowing what to do to check it, so that finally it burnt out when nothing was left to destroy. This was the famous "Gibraltar Sortie."

The siege was continued with its blockade and renewed bombardments, and it had attracted the attention of the entire world. Elsewhere, the

French, Spanish and other arms that were combined against England, had achieved great victories. The American Revolution was won at Yorktown, in October, though the formal treaty of independence had not yet come, and the Allies against England were anxious to make an impression upon Gibraltar. So the French came to the help of the Spanish, and the command of the besiegers was changed, the Duc de Crillon, who had recently captured Minorca, being made general of the forces, and a noted French engineer, the Chevalier d'Arçon, was given every facility to construct the most formidable naval armament to reduce the fortress that had ever been created. The garrison had their ninety-six guns, the best of which carried a shot occasionally two miles and a half, which was considered a wonderful performance in those days. There were no naval ships at that time able to withstand these shots, so the blockading fleet was kept out of range. The Chevalier, however, conceived the plan of constructing "battering ships," which could withstand this gun fire, and therefore venture near enough for an attack that would make a breach sufficient to permit a storming party to mount the walls, and he was sure the French grenadiers, who had been constant victors everywhere else, would then succeed. Ten of the largest Spanish three-decked naval ships were taken, their huge towering bulwarks cut down, and a strengthening method adopted which

reduced them to one broad deck, and in a way seemed to anticipate the American invention nearly a century later of the iron-clad. The Chevalier made one deck over the ship from stem to stern, on which his guns were placed, this deck being strengthened by triple thickness beneath of stout oaken beams braced against the sides of the hulls, and having a copious layer of sand in which the cannon-balls were to bury themselves. Then he lined the structure with a wall of cork-wood, which being elastic was to offer the best resistance to the shot. To protect the crews, the decks were roofed over with heavy timbers covered by ropes and hides, as the ancients did to shield their assaulting parties in sieges from showers of stones. Thus thoroughly protected, the men could work their guns, and the Chevalier proudly declared that his floating fortresses "could not be burnt, nor sunk, nor taken." All this preparation on the bay shores to the westward was in full view of the garrison, and they could see the busy workmen and the long lines of mules bringing to the yards the supplies and ammunition, while the deserters told of the elaborate preparations that went on for months. As the work progressed, the confidence of the besiegers grew, and the fever of expectation spread throughout Spain and France, while the Count of Artois (afterward Charles X of France), brother of the French king, Louis XVI, came from Paris to

Gibraltar to witness the anticipated surrender of the fortress. The Chevalier expected this result to come twenty-four hours after the attack, and ridiculed the suggestion of the more experienced army commander, the Duc de Crillon, that as much as two weeks might elapse before the Rock was actually captured. While the preparations were going on, the British Admiral Rodney in April, 1782, gained a victory in the West Indies over Count de Grasse, which almost annihilated the French fleet, and the tidings of the victory greatly inspirited the long beleaguered Gibraltar garrison.

The siege had continued over three years when the besiegers' preparations for the grand final assault were completed; and all the available naval power of France and Spain being concentrated upon Gibraltar, there came to the strait an additional fleet of thirty-nine ships of the line, arriving September 12th, 1782. This made a besieging naval force which was the largest since the Spanish Armada — fifty line of battle ships, with many frigates and smaller vessels, and also a land army of forty thousand men, and hundreds of cannon in batteries along the bay shore at every point of vantage. "Old Eliott" had to bring against it his ninety-six cannon and about seven thousand soldiers and sailors, but he also held possession of his stout castle, the famous Rock. The world was watching the expected performance, and as the besiegers were

only awaiting the arrival of the ships, the attack was ordered for the following day. Soon after sunrise on September 13th, the fleet of battering ships was seen getting under way from across the bay, while the Spanish grandees and their French guests with other spectators were posted on high ground within the Spanish lines to see the fortress captured. The garrison was ready, too. Their guns were all shotted and "Old Eliott" stood on the best point of outlook, the "King's Bastion" to give his orders. The Spaniards feeling sure that their battering ships were shot-proof, no longer cared about keeping at long range, but came within half-gun shot of the Rock, and moored in line of battle. Many large boats were in waiting full of troops, ready to land when the guns on the Rock were silenced. Everything was quiet till the Governor from the "King's Bastion" thought it time to begin work, and he ordered fire opened on the Spanish ships. The firing having started, the ships answered from their whole line, the Spanish shore batteries took up the fire, and soon there were four hundred guns playing on the town and ramparts of the fortress, the Rock reëchoing the infernal din which came back in responsive echoes from the hills behind Algeciras. It required some time for the Spanish guns to get the proper range, but by noon their fire was powerful and well-directed, so that some of the casemates were penetrated, guns

were dismounted, and English soldiers killed and wounded. "Old Eliott" remained on the "King's Bastion," and concentrated all his firing on the Spanish ships, and would not permit any ammunition to be wasted upon the shore batteries — it was the ships he was fighting and not the noisier and more numerous guns on land, which could do him no serious harm. The defence, however, made little impression on the ships. Though fired at short range, the balls from the thirty-two pounders, the best guns, could not pierce the ships' stout sides, and the shells rebounded from the roofs without doing much damage. If this had been the only available defence, Gibraltar might then have fallen, the besiegers being in such overwhelming force.

The sturdy commander of the fortress, however, had learnt from the successful sortie the value of fire as an auxiliary, and he had begun, days before, the preparations for using hot shot. Furnaces had been placed beside the batteries and fuel served out, and these were got to a white heat, the heavy balls being dropped into them and kept there until they were glowing red. Corners of old houses were also availed of in the town where the balls were piled up and surrounded with firewood. Some of these furnaces could bring a hundred balls to a red heat in a little over an hour. Having found that the ordinary cannon shots did little execution the firing of these hot balls was started. They were carefully

lifted from the furnaces and rolled into the muzzles of the cannons, it being found that only a very slight elevation of the gun was necessary, and the ball was rolled in by gravity. The Spanish ships had been moored just at the right distance for this, and the ball had no sooner rolled into the gun when the heat ignited the cartridge and it was almost instantly discharged at the enemy. At first the rain of hot shot made little impression. The French engineer, fully expecting them, had pumps working on the ships, pouring water upon the decks and the layers of sand where the red-hot balls buried themselves and were soon made harmless. They were fired by scores, and occasionally smoke was seen issuing from the ships, but the crews quickly extinguished the flames. The firing had continued until late in the afternoon before there was any appreciable effect, and then, about nine hours after the cannonade began, flames were seen issuing from the Spanish Admiral's ship, and soon the fire grew, and as night came was so fierce that the crew lost control, the blaze lighting up the entire Spanish line and thus helping the aim of the gunners on the fortress. Several other ships caught fire and sent up rockets or distress signals, so that boats came from consorts for their relief. The hot balls were doing their work, and by midnight the bay presented a fine spectacle, almost every Spanish ship being in flames. Then a panic came upon the Spanish sailors, the flames mounting the rigging, and making

the decks intolerable, so the men began jumping overboard. One of the ships was in such a blaze that the powder magazine had to be flooded to prevent an explosion. Nine of the ten Spanish floating batteries were on fire, lighting up all the bay shores and the sombre Rock, and adding to the vast pall of smoke overhanging the scene. As the crews in panic had abandoned their guns and jumped into the sea for safety, the firing upon the fortress had ceased, the shrieks of the wounded and drowning filled the air, and the scene became awful beyond description. Boats put off from the shore to pick up the struggling men in the water, and in this rescue the English heartily joined. One Spanish ship blew up just as an English boat got alongside and its coxswain was killed and several of the oarsmen wounded, but the other men stuffed their jackets in the broken sides of the craft, and kept her afloat. The English rescued over three hundred and fifty of the Spaniards, caring for the wounded in the hospitals of the fortress. Thus ended the great attack by the ships which was to have captured Gibraltar. The bay was covered with wrecks as next morning's sun rose on the frightful scene, but the bombardment continued in desultory fashion a few days longer, though the battle was over.

The siege went on afterward, but without any serious conflict. No one appeared with further suggestion as to a method of taking the fortress, and the

English flag floated over it until the Treaty of Versailles in 1783, by which England acknowledged the independence of the United States, and the treaty at the same time formally declared the English title to Gibraltar — England, France and Spain then uniting in making peace. The besiegers got the first news of this treaty and sent word to the garrison; and soon afterward a British frigate came into the bay and confirmed it. Since then the grim Rock has been at peace, the world conceding that it cannot be captured. General Eliott was made Lord Heathfield and Baron Gibraltar for his stout defence during nearly four years of the great siege, and he was called home to England in 1787, the national hero. Sir Joshua Reynolds painted his portrait, holding firmly in his hand the key of the fortress, while in a background of the clouds of war are seen the cannon pointing downward as he had fired them from the famous Rock. "Old Eliott's" monument, a rather indifferent bust, stands in the gardens of the Alameda, and along with it is that of Wellington, while near by it is mounted a one hundred ton gun, one of the two which the armament of Gibraltar now includes. Down in the town in the court of the old sixteenth century Franciscan Convent, which is the Governor's residence, is a curious statue of Eliott carved from the bowsprit of the Spanish ship San Juan which was captured at Trafalgar. The panels of some of the doors of the banquet room

within the Convent are made of cedar wood from the wrecks of the Spanish battering ships engaged in the bombardment of the Rock fortress in 1782. In the Convent garden is a dragon-tree believed to be a thousand years old.

THE FORTRESS TO-DAY.

Gibraltar is a complete fortress-town. The sunrise gun begins the day, and the sunset gun ends it, while the evening gun at half-past nine orders the soldiers into their barracks. The ceremony of locking the gates at sundown goes on now as it has for centuries. The "Keeper of the Keys," clad in the uniform of the troops, marches through the streets in the centre of a military guard, led by a regimental band. The keys of enormous size are borne before him. Arriving at the gates, the band plays, the guard salutes, the huge doors are slowly closed and locked, and then the procession marches back to the Convent and deposits the keys in the Governor's keeping. As the only approach for an enemy is from the north or west, these are the sides that have the chief fortifications. The main work is the Line Wall, a ponderous mass of masonry over two miles long, with bastions projecting where the guns turn in either direction to sweep the approaches to the face of the wall. The Moles stretch out in the bay, with additional lines of cannon defending the

harbor and its entrance. Other lines of batteries are carried around the western face southward to Europa Point. The casemates and barracks for the artillery are within the Line Wall, the thick walls and arched roofs of the casemates being designed to resist the heaviest shot and shells. Most of the guns are in the casemates not far above the water-level, but some are on the parapet. Other batteries are in the rear of the town, in the galleries hewn out of the rock, which fire over the housetops, and as one mounts the Rock it bristles with guns, seen in every direction, while the crest is similarly defended by some of the most powerful cannon of latest type. The batteries of Europa Point are also thoroughly equipped. The biggest guns — the two 100 ton Armstrongs — are nearly thirty-three feet long, and with a charge of four hundred and fifty pounds of gunpowder fire a projectile of eighteen inches diameter weighing two thousand pounds about eight miles. The boom and crash, when such a gun is fired, are something terrific. But these big guns are not now regarded as the most powerful. The later gunnery improvements are said to demonstrate that twelve inches is the maximum diameter of rifled bore for effective work, and eight inches bore produces the best results in a rapid fire breech-loader with a projectile weighing two hundred and fifty pounds that can be fired six

times a minute. The object now is to combine quick firing with the highest initial velocity and the greatest penetrating power against attacking ships.

The special feature of Gibraltar is the rock galleries, which were mostly constructed during the Great Siege. The besiegers then with their cannon balls reached all parts of the Rock, their shells flying in every direction and being thrown so successfully that the English gun on the highest pinnacle was twice dismounted. To secure safety and a better defence these rock galleries were hewn out. They are excavated along the northern face, about six hundred feet above the sea level, much like a railway tunnel, having at short intervals the port holes for the cannon, and extend over a mile in two tiers one above the other. At the end, they are enlarged into an open space called the Hall of St. George, where Nelson was once feasted by the officers of the garrison, this function being a great memory at the post. The cannon thrust out through the port holes of these galleries, all point northward toward Spain, and they were the principal bulwark of defence during the Great Siege when the attack from that direction was most feared. High above them, on the pinnacle of the lion's head, is mounted the "Rock Gun" which the besiegers were then able to dismount by their shells. On the King's birthday this gun gives the signal for the lion's roar at Gibraltar, when from all parts of the Rock the cannon fire the an-

nual salute to the sovereign. Prominent in the western defences overlooking the bay is the "King's Bastion," where "Old Eliott" stood on the day of the final attack upon the Rock in the Great Siege. Beyond the Southport Gate and between it and the Alameda is the "Ragged Staff Stairs," where Admiral Rooke's forces landed when the English first took the town and the Rock in 1704.

Since the great modern development of naval ships and guns there has been much serious discussion as to the value of Gibraltar as a fortress. It is contended in France that a hostile fleet, by hugging the Moroccan coast at night, can easily pass between the Mediterranean and the Atlantic. It is also contended that the harbor on the west side of the Rock is entirely at the mercy of the Spaniards should they be hostile, as they can plant batteries on the range of hills on the western side of the bay, beginning behind Algeciras and stretching northeastward around the bay head and over to the high hill of Carbonera, known as the "Queen of Spain's Chair," which is not far away from the Mediterranean to the northeastward. Thus the harbor and town can be commanded by modern guns mounted on Spanish territory. During the past few years England has been greatly strengthening the Gibraltar defences and making the harbor a much more elaborate naval and coaling station, expending upon these improvements an amount approximating

$25,000,000, while at the same time her diplomatic power is fully enforced to prevent the construction of any offensive works in Spanish territory or across the strait of Morocco. The English authorities are fully alive to the need of maintenance of the great fortress in the front rank it has so long occupied.

RONDA AND MALAGA.

Brisk little steamers carry the visitors westward from Gibraltar across the bay to the white houses of Algeciras, past the green island which is outlying, and giving superb views backward at the stupendous Rock. A railway leads northward from Algeciras, climbing gradually up to higher levels on the hills, which is the main route of the modern traveller from Gibraltar into Spain. It runs among the Sierras and through forests of cork trees, the chief staple of this region, past villages and over ravines, and at numerous turns gives constantly higher but more distant views of the Rock fortress down by the sea. One of these villages is Gaucin, perched 2,000 feet high in the mountain, the little cluster of houses with the prominent jail being long visible as the train approaches, and described as looking "like a grain of salt sparkling in a wrinkle of the monstrous hill." Although Gibraltar is over thirty miles away, it is distinctly visible, and also the opposite African coast. Entering the Sierra de Ronda, the line makes its crooked route through

the long narrow pass of the Angostura, once noted for brigands, thus going up the picturesque ravine of the Guadiaro, by many tunnels and bridges; and after sixty-seven miles of circuitous travelling, ever mounting higher, it reaches the ancient and romantic town of Ronda at twenty-five hundred feet elevation, once a Moorish stronghold, and now celebrated for "its bridge, its bull fights and its fair." Nestling amid a magnificent amphitheatre of mountains, some rising in peaks more than a mile high, and built on a hill rent in twain by the Tajo river chasm which is nearly four hundred feet deep, this place, dating from the Roman time, now has an Old Town built by the Moors on the southern part of the hill, and a New Town on the northern side, which the Catholic Kings of Spain constructed when they captured Ronda in 1485 after a twenty days' siege; and there is a population of about twenty thousand in both settlements.

This is a singularly picturesque and curious place, most of it apparently hanging on the edges of the *Tajo* or gorge, cleft down in the hill by volcanic action, and having the river torrent rushing through it far below, while at the narrowest part, where the width is only about two hundred and thirty feet, the bold single span stone bridge, the Puente Nuevo, is thrown across it, giving splendid views of the chasm and the torrent. An underground staircase, the Mina, descends to the bottom of the gorge, its

steps having been hewn out of the solid rock in 1342 by Christian slaves, the Moors having thus constructed it when attacks were frequent, to avoid a water famine in case of siege. Two ancient Moorish bridges also span the gorge.. The hanging gardens of the Alameda on the verge of the ravine are among the attractions, and also the spacious stone bull-ring in the Plaza de Toros where it is said some of the best bull fights of Spain are exhibited at the May fair, the ring being large enough to accommodate an audience of ten thousand. The natives, because of their isolation, have retained in their original purity the ancient Andalusian habits and attractive costumes, and they include some of the best horse tamers in southern Spain, which accounts for their skill in bull-fighting. The mountain elevation of Ronda gives it an admirable climate, and this with its varied attractions have made it a popular summer resort. It was in the neighborhood of Ronda, B. C. 45, in the Roman wars, that Cæsar defeated the sons of Pompey on the field of Munda, a settlement which long ago disappeared.

About forty miles northeast of Ronda, this railway route to Granada intersects the road coming southward from Cordova to Malaga, at Bobadilla, which has thus become an important Spanish railway junction. The route to Malaga goes over to the Mediterranean coast, which is forty miles distant, following the valley of the Guadalhorce all the

Malaga.

way down to the sea. It gets out of the mountains through the gorge of the *Hoyo,* or "hole," cut deeply into the slaty strata of the coast range, a wild ravine traversed by the aid of many tunnels and bridges, and emerging amid the palms and orange groves of the sub-tropical region in the widened valley nearer the sea coast. The Guadalhorce is left, the railroad crosses the fertile *Vega,* and soon Malaga is reached, spread around its beautiful harbor and upon the hill spurs projecting from the various Sierras to the northward. In the centre rises, at an elevation of nearly six hundred feet, the Gibralfaro of Malaga, the most prominent object of this noted city of one hundred and thirty thousand people. The Phœnicians first settled the place as a station where they cured their fish, and named it Malaca, from the word *malac* meaning "to salt." Vespasian made it a Roman city, the Visigoths took it, and then the Moors got possession when they overran Spain in 711. It ultimately became one of the chief seaports of their kingdom of Granada, thus continuing until captured by Ferdinand and Isabella in 1487, after which it lost much of its importance. Malaga is now a leading Spanish port on the Mediterranean, although the harbor is shallow from silting, so that deep draft vessels have to lie in the outer roadstead. It is in magnificent position, the beautiful bay a reproduction in miniature of the bay of Naples, and in the background a dis-

tant amphitheatre of mountains environs the land and fertile *Vega,* formed by the extensive delta of the Guadalhorce. This plain spreads to the westward, the city being built upon the banks of a smaller mountain stream at the eastern verge of the plain, the Guadalmedina, meaning "the river of the town," which is crossed by several bridges and has the inner harbor to the eastward of its mouth. Malaga has a delicious climate, a splendid outlook over the blue sea, and is becoming a popular winter resort.

The great hill of the *jebel pharos,* the "hill lighthouse," its Moorish name being since developed into the Gibralfaro, dominates the view from all parts of the city. Upon it is the castle, the extensive buildings covering the summit, and enclosed by a ponderous wall. This was the Moorish stronghold, constructed in the thirteenth century, and from it the extensive view seaward is far across to the hills of Africa at Ceuta, the Hill of the Apes, Abyla, being distinctly traceable in fair weather at the distant horizon. A spur of the Gibralfaro to the southwestward, the Alcazaba, is said to have originally been the site of the Phœnician defensive work, and the Moors converted it into a palace-fortress, of which portions yet remain. It was this hill that was stormed when the Spaniards captured Malaga from the Moors in August, 1487, and there is yet preserved the Torre de Vela, on which Pedro of

Toledo then planted the Christian standard when they drove out the infidels. The place now is a maze of small tenements and ruins occupied by gypsies and a poorer class of population. Down on the lower ground at the southwestern base of the hill was the great Moorish mosque, which the captors then converted into a Christian church. This edifice was superseded afterward by the Malaga Cathedral, which was built in bits during four centuries, a dazzling white limestone structure nearly four hundred feet long and two hundred and fifty feet high, one of its towers being elevated two hundred and eighty feet, and the other incomplete. The interior is imposing, the massive nave rising one hundred and thirty feet, and the pavement is flagged with white and red marbles. Malaga does not have many attractive buildings, but it is a thorough Andalusian city, its people enjoying their splendid outlook and fine climate, while the ample exports of the fertile surrounding district give it a good trade.

GOING TO GRANADA.

From Bobadilla it is seventy-seven miles eastward to Granada, the railway at first following up the valley of the Guadalhorce, then crossing a dreary plateau making the watershed between this stream and the Jenil, and afterward following that vigorous torrent up to the Sierra Nevada. The route displays prolific remains of the Moorish rule, and all

the towns still exhibit ruins of their strongholds and castles captured in the gradual encroachment of the Spanish Catholic sovereigns upon the Moorish domain. At Antequera, ten miles from Bobadilla, the Arch of Hercules was erected in 1595, and adorned with Roman inscriptions brought from several of their ancient settlements in the neighborhood, this being done in honor of the Spanish king, Philip II. Its Church of San Sebastian is surmounted by a colossal bronze armor-clad angel, wearing around the neck a reliquary with relics of St. Euphemia, the patron saint of Antequera. In the suburbs is the famous "Rock of the Lovers," its romantic legend being told in Southey's *Laila and Manuel.* The Moorish maiden and the Spanish knight, pursued and unable to escape, jumped from the cliff, locked in each other's arms. Emerging from a tunnel in the hills the railway suddenly overlooks the fertile and pleasant valley of the Jenil, and far off to the eastward are seen the snowy Sierra Nevada peaks. Here is Loja by the riverside, the Moorish Losha, which with Alhama, twelve miles southeast, both being at the entrance to mountain passes, were the two "Keys of Granada." Loja was captured by the Christians after thirty days' siege in 1488 and its ancient Moorish castle is a ruin. Alhama stands on a terrace high above the deep gorge of a little stream, and was captured in February, 1482. Its fall was bewailed in a ballad

of the time, which Byron translated in his poem, *Woe is me, Alhama.* Now it is best known from its warm sulphur baths. The railway following up the Jenil passes Illora, its ruined Moorish castle on the mountain side having been the "Eye of Granada." A few miles beyond is Pinos-Puente, an original Roman settlement, of not much importance now, but noted as the place which was the turning point of the fortunes of Columbus.

Having failed in his efforts with King John of Portugal, Columbus had appealed for assistance to Ferdinand and Isabella, conducting a long negotiation for aid in fitting out his expedition to discover the western world. They had then captured Granada, and he had gone to the camp in the Spring of 1492, but meeting repeated rebuffs, had left in despair and was returning on the road down the Jenil, with the half-formed idea of going to France in the forlorn hope of interesting that country's king in his project. Queen Isabella, however, changed her mind, and sent messengers to bring him back, and they overtook him at Pinos-Puente. He was taken four miles up the river to the camp at Santa Fé, where he met the Queen, and on April 17, 1492, the famous contract was made with him upon which his voyage of discovery was founded. This region is the celebrated *Vega* of Granada, the beautiful and fertile broadening of the Jenil valley in the midst of the mountains, and Queen Isabella during

the siege of Granada had constructed here the Spanish camp in eighty days. Its form was that of a regular Roman encampment, its streets crossing at right angles, and here was signed the capitulation of Granada. The original document is still preserved in the Spanish archives at the castle of Simancos near Valladolid. Santa Fé is now a small and deserted village, yet near it was one of the earliest known settlements in Spain, long ago disappeared, the Illiberis of the ancients, which the Romans found on their arrival, and which the Moors destroyed. The chief present curiosity in Santa Fé is the trophy above the church door, showing a lance with a sheet of parchment, bearing the words *Ave Maria.* During the siege of Granada, a bold knight, Hernan Perez del Pulgar, managed on the evening of December 18, 1490, to enter that city through a conduit up the Darro, and going to the principal mosque, pinned to the door with his dagger a scroll inscribed *Ave Maria,* afterward regaining the camp at Santa Fé unharmed. The Moors were highly indignant at this insult, and sent their champion Zegri Tarfe with the scroll back to the Christian headquarters, where he defied them to single combat. Don Garcilaso de la Vega promptly accepted the challenge and slew the Moor, whereat there was great rejoicing and the trophy was placed on the church as a memorial. A few miles beyond,

The Alhambra and the Valley of the Darro.

the railway enters the station at the northwestern outskirts of Granada.

THE ALHAMBRA PALACE.

The river Jenil comes from the southeast, a mountain torrent copiously fed by the melting snows of the Sierra Nevada, the noble peaks of this giant range rising grandly along the southeastern horizon. This stream, as already stated, was the Moorish *Shenil,* its name derived from the earlier title of Singilis given by the Romans. It goes off to the westward down the valley of the beautiful *Vega* of Granada, through which we have gradually ascended to an elevation of twenty-two hundred feet above the sea. The famous city of Granada stretches over the plain southward from the railway station down to the banks of the Jenil, and also spreads upward upon the high hills to the eastward, culminating in two noble eminences abruptly rising five hundred feet, and having higher elevations beyond. Between these two hills is a deep ravine, through which flows the Moorish *Hadazzo,* now called the Darro, curving around from west to south as it passes through a vaulted channel under various streets in the heart of the city to reach the Jenil; but being without much current, as most of its waters are drained for irrigation of the regions passed in its upper course. This stream used to bring down gold in its sands, before

the waters were diverted, and its valley made Granada, the "city of the pomegranates," the city arms still bearing the stalked pomegranate supported by the Pillars of Hercules. Granada has a picturesque situation at the base of the two mountain spurs, with the splendid Sierra Nevada for its southeastern outlook, but the city is only the ghost of its former self, now still and even mournful, living on the memories of the great past, for it has barely seventy-five thousand people where it had over a half-million, when the Moors, driven from Cordova, Seville and the many settlements on the Guadalquivir, came to this mountain fortress as a last refuge and maintained themselves for over two centuries. It was then they built the greatest palace and ruin that Spain has to show.

The northern of the two projecting hills to the eastward of the city, is the long ridge of the Albaicin, the name being derived from an Arab phrase meaning the "quarter of the falconers." Here lived the Moorish nobles in the former days, and it is the oldest part of the city, the Roman *Garnata,* though now occupied mostly by gypsies and the poorer classes. To the southward the hill falls off in the deep ravine of the Darro, and south of this steeply rises the other hill of the Alhambra — the Moorish *Medinet-al-hamra,* or the "Red Town,"— so called from the reddish-colored stone used in the outer walls. The Romans had a small village on

this hill, and the Moors when they first came to Spain in the early eighth century, built their *Kasaba al-kadlma,* or "old citadel," on Albaicin, but afterward reinforced it by constructing the *Kasaba al-djedida,* or "new citadel," on this hill. These eminences were the site of the original town, but after the decline of the Caliphate of Cordova began in the eleventh century, through gradual Christian conquest, the refugee Moors flocked into this mountain fortress, being encouraged to come by the Zirites dynasty then in power, and the rapidly expanding settlement, in the subsequent period spread down the hill slopes and over the lower plain, thus making the latter district the chief part of the greatly enlarged city, and it ultimately became the most important section. Thus were formed various new districts, among them Antequeruela or "little Antequera," originally peopled by refugees from that city, and now the part of Granada which covers the banks and stream bed of the Darro. From 1031 until 1492 Granada was the great Moorish kingdom of Spain, its power expanding under various dynasties, chiefly the Nasrides, begun by Mohammed I, who was the sovereign when St. Ferdinand captured Cordova in 1236 and Jaen in 1246. For over two centuries afterward, though often rent by internal factions, this Moorish kingdom was maintained, until Ferdinand and Isabella got possession of Granada, January 2, 1492, an

event still celebrated on the anniversary, by a procession to the cathedral in the morning, and the ascent of the Torre de la Vela of the Alcazaba, the western termination of the Alhambra, by a deputation of the young girls of the city, who in continuance of an ancient custom, sound the bell for an hour in the afternoon "in order to secure a husband." It was upon this high Moorish *Ghafar* or "watch-tower" on the afternoon of the Christian occupation that Ferdinand displayed his "banners of the Catholic kings" in token of possession. It was in Mohammed I's reign that the Alhambra was begun. His predecessors had their royal seat on the Albaicin hill, with fortifications on the Alhambra Hill. Mohammed I, who reigned forty years, and was the originator of the Moorish motto so extensively displayed in the buildings, which translated means, "There is no conqueror but the Most High God," selected the Alcazaba for his residence. On this bold western outlook over the *Vega* valley, the Alhambra construction modestly began. His successors continued it, spreading the structure all over the hill, the finest portions being built in the fourteenth century by Yusuf I and Mohammed V.

When the surrender was made to Ferdinand and Isabella, they restored and preserved the Alhambra, but afterward Granada dwindled in importance, the population diminished, and many changes came in the Alhambra that destroyed much of its beauty.

The greatest potentate of Europe in the first half of the sixteenth century was the Emperor Charles V, who succeeded his grandfather Ferdinand as king of Spain in 1516. The process of expelling the Moors from Castile and Granada had been going on vigorously. Ten years after his accession, Charles came to Granada, and had many parts of the Alhambra pulled down to make room for a new palace within the walls. Somewhat later a powder explosion did great injury, only partially repaired. In the eighteenth century the revenues usually assigned for the maintenance of the buildings were taken away by Philip V, and for nearly two hundred years the palace was almost totally neglected and fell into decay. The French held it in Napoleon's time but upon evacuating in 1812 blew up several towers of the fortress. In the later nineteenth century the Spanish government made extensive restorations, and while the Alhambra is not now the splendid Moorish palace it was in the fifteenth century, it is still the greatest structure in magnificent attractiveness that Spain can show, having been well described as the "gem of the delicate fancy of the Moor; the realized vision of the Arabian Nights." Much of the romance surrounding it has been the result of Washington Irving's visit to Spain and long sojourn at Granada, in his interesting work *The Alhambra* published in 1832.

The hill of the Alhambra is divided into two

parallel ridges by a gorge which the Moors called *Assabica,* where are now the gardens and groves of the Alameda of the Alhambra. To the southward of this gorge, which stretches from the west toward the higher ranges eastward, the hill is called *Monte Mauror,* the "district of the water carriers," and is surmounted by the *Torres Bermejas,* erected by the Moors on its western verge — the "Vermilion Towers,"— now a military prison, the view over the city and *Vega* with the grand environment of mountains, being most charming. In the Alameda the trees are mostly elms, brought from England and planted there by the Duke of Wellington after the English occupation in 1812, and watered by an irrigation stream from the river Darro, coming from its upper course. The running waters are murmuring all the time, the noble trees with their thick mass of foliage are the nesting places of thousands of singing birds, and the lovely vale is a place of most attractive retirement, a sacred grove reproducing the restful sylvan beauty it had when it was the *Makbara* or cemetery of the Moorish kings, until Boabdil, the last of the race, took their remains away.

North of the Alameda gorge rises the higher and bolder hill of the *Monte de la Assabica,* on which is the Alhambra. Its western front overlooking the city at an elevation of nearly five hundred feet displays the *Alcazaba* or citadel, the hill faces all

around, excepting on the eastern side, rising precipitously, which gave additional strength to this Moorish fortress. There are only scant remains of the original buildings, and the enclosing walls and towers are rather dilapidated. The interior of the ancient structure is now a garden. Originally a wall crossed the gorge from the *Alcazaba* to the *Torres Bermejas,* thus guarding the entrance to the Alameda, and here stood the gate to the Alhambra, the Moorish *Bib Alaujar,* both wall and gate being now for the most part removed, and on the site of the gate is the triumphal arch of the *Puerta de los Granadas,* erected to glorify Charles V, and having carved at the top three open pomegranates, representative of the city. Eastward of the *Alcazaba,* the hill summit is a plateau about a half mile long and six hundred feet wide, on which the Alhambra buildings are constructed. Farther east this plateau is cut off by a ravine, separating it from the higher *Cerro del Sol,* towering above the plateau, and upon the *Cerro* is the Generalife Palace, at an elevation of nearly two hundred feet more, this having been the summer residence of the Moorish kings. Its cypress groves and garden extend farther up the hill slope, where a Mirador tower has been recently built for the outlook. Behind this and yet higher, is the summit of the eminence, the *Sella del Moro,* where there was a mosque in the Moorish days, and from it

is a grand view over the Alhambra and the deep gorge of the Darro to the right; with the city and, spreading far away westward, the *Vega*.

Ascending the hill slope from the Alameda, the Alhambra enclosure is entered by the imposing tower gateway, the Puerta Judiciaria built by Yusef I in 1348, the Moorish *Bib Kharea* or "Gate of the Law." This is a tower building nearly seventy feet high and fifty feet wide, having an outer and inner gate connected by a passage which was made tortuous for a better defence. The horseshoe-topped outer gate rises about half way up the front, and has carved above it a hand with outstretched fingers, the Moorish symbol used to avert the "evil eye." Above the inner arched gate is similarly carved a key, the symbol of power, and the superstitious belief was that Granada would defy all foes until the outer hand had seized this inner key. After the conquest, a wooden figure of the Virgin was placed on the inner gate. The massive wooden doors are shod with iron. Within the gate and at the top of the hill, is the spacious Plaza de los Aljibes, the "Place of the Cistern," this extensive water storage receptacle one hundred feet long being filled with filtered waters from the Darro. Beautiful hedges of myrtle adorn the Plaza, and on its eastern side are the Moorish Alhambra, now called the Casa Real, and the more modern palace of Charles V, which adjoins the former on the southwest; while on the

western side of the Plaza is the imposing façade of the Alcazaba with its towers. To the northward the Plaza is bounded by the deeply cut ravine of the Darro. The walls of the Alcazaba, which are among the few relics left of the original structure, have in parts Roman work. The ancient citadel stands high on the top of the western extremity of the bold hill, and its famous *Ghafar*, already referred to, is the outpost watch-tower overlooking Granada and on the very verge of the cliff. The pinnacle of this, the Torre de la Vela, is a turret containing a huge bell of twelve tons weight. This bell is rung at night to regulate the opening and shutting of the irrigation channels conveying the Darro water through the *Vega*. The tower presents a splendid view of the ancient city spreading far below, of the Torres Bermejas rising beyond the Alameda gorge on the one side, and the Albaicin hill beyond the Darro ravine on the other; while far away westward is the green and fertile *Vega* enclosed by brown hills making an almost circular background. All around, in the distance, are the higher Sierras, with the conspicuous snow-clad peaks of the elevated Sierra Nevada toward the southeast. Eastward is the Alhambra, in the foreground across the Plaza, backed by the higher Generalife and the towering summit of the Cerro del Sol. Such is the introduction to the Alhambra.

The Moorish builder's and decorator's art was

in its earlier development when the Cordova mosque and the Seville Giralda were erected, while the Alhambra was a later and more finished construction. Like all Moorish buildings, the exterior is unpretentious, and eclipsed by the later and much more imposing palace of Charles V alongside. The Arab house always has its rooms opening upon an inside court, and such was the system of constructing the Alhambra, as successive kings of Granada enlarged it by building new courts and surrounding rooms, so that it is really a series of palaces each with separate court and entrance. This was, however, altered by the changes after the conquest, so that now the entrances are in some respects differently arranged. The present modern entrance is low-lying and alongside Charles' Palace, the *Estrada Moderna,* at the termination of a passageway, and leads into the Court of the Myrtles, which is the central court of the great Palace of Comares constructed by Yusuf I and his successor Mohammed V, in the fourteenth century. Yusuf also built the red enclosing wall around the entire hill, with twenty-three towers. It was in this Palace of Comares that the Moorish kings sat in state, receiving embassies and holding councils. The Spanish names of the famous court are *Patio de la Alberca,* derived from the extensive *alberca,* or water-pool, in its centre, for which the Arab title was *birkeh;* and *Patio de los Arrayanes,* or Court of the Myrtles, named from the myrtle

hedges or *arrayanes* surrounding the pool. The court is one hundred and twenty feet long and seventy-five feet wide, but has lost much of its original beauties through indifferent restoration, so that the first view is rather disappointing. In this connexion it is interesting to recall the observations of an artistic visitor, who has traced the Moorish art development culminating in the Alhambra.

The Moors in decoration worked largely in wood and plaster, and their object seemed to be the reproduction of the tent of the nomad Arab. The fragile and thin marble columns, on which rest large and apparently heavy masses of masonry, imitate the tent poles; the brilliantly colored ornamentation echoes the gay patterned carpets with which the tent interiors were draped; while the stalactite, honeycombed vaulting of the domes seems due in its regular step-like formation to a sort of mathematical calculation. The Moorish fancy is bewildering in the blending of geometrical figures and foliage and other forms in endless convolutions, but there is no sculpture, as they do not reproduce living creatures. Inscriptions, mainly in the old Cufic characters, are liberally used for borders, usually religious or poetical, and the latter are eulogistic of the Moorish kings. To get the full idea of the Alhambra, the visitor needs to use some of the imaginative powers, in reviving the coloring of the plaster walls, getting the waterless fountains to play again,

picturing the empty rooms as gaily decorated and illuminated, while the lovely natural surroundings seen through the open windows add to the harmony. The sides of the Court of the Myrtles are at present plain, but beautiful arcades adorn the ends, each borne by six slender marble columns and paved with marble slabs. The southwestern arcade is the finest. The northeastern arcade has alcoves on either side with stalactite vaulting originally colored blue, and the motto "There is no conqueror but the Most High God," originated by Mohammed I, and also another, describing Mohammed V as the conqueror of Algeciras in Algiers in 1368, and lavishly praising him for building this palace. Thus, one of these inscriptions is translated "Thou givest safety from the breeze to the blades of grass, and inspirest terror in the very stars of Heaven; when the shining stars quiver, it is through dread of thee, and when the grass of the field bends down, it is to give thee thanks."

This palace is named from its tower, the Torre de Comares, said to have been constructed by Moorish workmen from Comares down by Malaga. In the northeastern end of the Court of the Myrtles there is an imposing horseshoe arch over the gateway which connects with the entrance hall of the tower, this being an elaborate vestibule, narrow, but stretching about seventy-five feet across the palace — the *Sala de la Barca,*— thus called because the vaulting

of the ceiling, some time ago destroyed by fire, originally resembled the hull of a boat. Niches of marble, on either side of the entrance, were made for water vessels, and similar niches across the vestibule adorn the arched exit beyond, which leads through the massive wall of the tower to its chief apartment, the "Hall of the Ambassadors," occupying the whole interior. This splendid Hall is sixty feet high and thirty-seven feet square, and was the reception hall of the Moorish kings, the throne being opposite the entrance. High above rises the noble tower, elevated almost one hundred and fifty feet, the battlemented top being of modern construction. There are many inscriptions in the vestibule and Hall, Yusuf I being indicated as the builder. Among them are verses in Arabic testifying the goodness and nobleness of Allah, of which this is one: "He who comes to me tortured by thirst, will find water, pure and fresh, sweet and unmixed; I am like the rainbow when it shines, and the sun is my lord." The thick walls of the Hall are pierced by deeply recessed windows, giving fine views over the city and the Darro ravine, while high above is a domed ceiling of larchwood, resembling in its carvings a splendidly cut precious stone. The ornamentation has red and blue as the predominant colors, and is among the finest in the palace, there being many varying patterns. The mournful tale is told of the last assemblage of the Moors, summoned to meet in this

Hall by the unfortunate Boabdil, which decided upon the surrender of Granada to Ferdinand and Isabella.

As the Torre de Comares is upon the northeastern side of the Court of Myrtles, on its southeastern side is the noted Court of the Lions. Its vestibule alongside the former court is the *Sala de los Mocarabes*, thirteen feet wide and sixty-five feet long, with decorations in blue, red and gold and a modern roof of barrel vaulting, the original ceiling having been destroyed by a powder explosion in the sixteenth century. The Court of the Lions is ninety-two feet long and about fifty feet broad, surrounded by an arcade of one hundred and twenty-four columns, supporting stilted arches. These columns are single and in pairs alternating, with groups of three or four at the corners, while at each end there project graceful pavilions. The walls are of wood and plaster and the ceiling is a charming wooden construction in the "half-orange" form. The decoration of fretwork is exquisite, looking as if carved in ivory and giving a most elegant impression. The ceiling is modern, and the floor of marble slabs, with blue and white tile paving in the arcades. At the centre is a large fountain-basin, borne by twelve weather-beaten lions of marble, whence comes the name of the Court. Originally, the Court of the Lions was the chief feature of the winter-palace of the kings, and its construction was begun by Mohammed V in

the late fourteenth century. The central fountain basin is about ten feet in circumference, and there are also smaller fountains at the ends of the Court, the overflow of all coming to the centre. These fountains play on the great festival days.

There are elaborate and attractive apartments all around the Court of the Lions. On its southwestern side is the "Hall of the Abencerrages," named from that noble family which became very powerful in Granada in the middle of the fifteenth century. We are told that King Abu Nasr tried to curb them, by securing the murder of their chief Seid Yusuf, but the result was that in 1462 Abu Nasr lost his throne to his son Muley Abu Hasan. Then Muley's first wife Aisha became jealous of her husband's attentions to a charming Spanish slave Isabel de Solis, who had become a Moslem under the captivating title of *Zorayah,* or the "Morning Star," and when the king made her his favorite wife, Aisha caused trouble. Aisha saw that the right of succession of her son Mohammed Abu Abdallah, known as Boabdil, and even his life were endangered, and the Abencerrages sympathized with her. There was another powerful family, the Zegris, who took up the cause of the king Muley and his charmer, the "Morning Star." Violent dissensions arose, culminating in 1482, and these were the direct cause of the downfall of the Moorish kingdom of Granada, for Ferdinand and Isabella, whose great mission was

the expulsion of the Moors from Spain, took advantage of the quarrels, and in a few years became successful. They captured Alhama in 1482, and Muley afterward went down the Jenil with an expedition to try and recover it. While he was gone, the tradition is that Aisha lowered herself and her sons Boabdil and Yusuf from a window in the Torre de Comares and fled with them across the Darro ravine to the Albaicin hill, and then northeastward up through the mountain passes to Guadix, the Moorish *Wadi-Ash,* the "water of life." Here Boabdil was at once proclaimed king of Granada — *El Rey Chico* — and after a fierce struggle he next year dethroned his father Muley, who retired with the "Morning Star" to Malaga. Then Boabdil took the field against Ferdinand, but venturing too far down the Jenil, the Spaniards in 1483 defeated and captured him at Lucena. Boabdil thereupon made a treaty, acknowledging tribute to Ferdinand and thus held the Granada throne. In 1485 Muley died, his brother Ez-Zagal succeeding, and the next year, Boabdil returning to his Moorish fealty resigned Granada to Ez-Zagal, who was the last of the heroic leaders of the Moors. Again Boabdil battled with the Spaniards at the remaining stronghold down the Jenil, Loja, which with Alhama were the "Keys of Granada." Once more he was captured, and submitting, again pledged fealty to Ferdinand and returned to Granada, Ez-Zagal having gone to

the relief of Malaga. One after another of the Moorish strongholds fell, Ez-Zagal was entirely defeated, and then Ferdinand required Boabdil to give up Granada. After another final desperate effort he was forced to abandon the place, which was agreed upon by the treaty of 1491, and January 2, 1492, the Spaniards took possession of the Alhambra. In Boabdil's vacillating and unheroic career, he had many internal dissensions to cope with. He is said to have discovered a tryst of his Queen Morayma with Hamet, the chief of the Abencerrages, and this led to a horrible tragedy. He brought the principal members of that powerful family into this superb hall by inviting them to a banquet, and had them beheaded in his presence, whence came its name. Thus he got the enmity of the whole clan which helped precipitate his downfall.

The Hall of the Abencerrages is a magnificent apartment though comparatively small. Opposite the grand entrance, which has beautiful doors, recently restored, the central part rises in three stages, into an elaborate fountain, while above are a ceiling and dome, the ceiling being star-shaped and adorned with stalactites. There are reddish-brown stains on the marbles of the fountain, which tradition says were made by the blood of the decapitated Abencerrages. The overflow waters of the fountain run off through the entrance to the Court of the Lions. At either end of the Hall are flat-roofed alcoves,

while beyond are capacious water cisterns, and behind is the Rauda, a sepulchral chapel, where were discovered in 1574 the alabaster tombstones of three of the Moorish kings. Upon the southeastern side of the Court of the Lions is the "Hall of Justice," also called the "Hall of the Kings," the tradition being that here they dispensed justice. The entrance is by three separate archways, each divided by two columns. The ends are alcoves, and the ceiling is separated into sections, roofed by stalactite arches. These arches with the honeycombed vaulting make it look like a curious and fantastic grotto. There are some early fifteenth century paintings on the walls, done on leather by Moorish artists, and the central one represents ten bearded Moslems said to be portraits of the kings of Granada from Mohammed I to Abu the Red who reigned in the fourteenth century. There are also preserved here the alabaster slabs taken from the kings' tombs in the Rauda.

The "Hall of the Two Sisters" is an upper story on the northeastern side of the Court of the Lions. It opens at a somewhat higher level into the "Hall of the Ajimeces" to the northeast, and farther northeast is the Mirador of Daraxa, which looks out upon the Court of Daraxa. These three apartments were the residence of the Sultana, and are a suite of great magnificence. The "Hall of the Two Sisters" is named from two large slabs of white marble in the

pavement, and this is regarded as the most finely decorated apartment in the Alhambra. It has elaborate wall adornments in stucco and beautiful doors, but the great achievement is the ceiling. This is composed of honeycombed vaulting, and is said to be the largest existing Moorish roof of this character. There are five thousand cells, all differing, yet all combining in a plan of bewildering yet symmetrical beauty. Niches in the walls are flanked by graceful columns, and at each corner fantastic cell-fountains and stalactite pendants hang from the roof. Above rises the impressive dome, with its innumerable cells of tiny construction in every variety of form, as if a swarm of bees had been at work, one cell breaking into another, climbing above it, and being in turn used as a base for a third to rise higher. These cells and little domes soar upward in the most curious way, the roof doubling back upon itself and forming large vaults in its fantastic and involved combinations until the top is reached. The walls are fanciful and picturesque, dados covering the lower parts with convolutions in red, green and blue, and having above on a ground of plaster lace-work brilliant displays of embroidery. In this Hall stands the famous Alhambra Vase, with two handles, and enameled in white, gold and blue in exquisite fashion, displaying animals supposed to be gazelles. It is about four and a half feet high, dating from the early fourteenth century, the tradition being that at

the conquest it was found in the palace filled with gold. The Hall of the Ajimeces also has a fine ceiling, and opens into the Mirador de Daraxa, which has three tall windows cut down almost to the floor and looking out upon the Court of the Daraxa. The name of Daraxa means the "Vestibule," and it was here that Irving located the boudoir of his romantic Moorish beauty Lindaraja. In the Mirador is an inscription, which translated reads: "In these rooms so much magnificence presents itself to the gazer that the eye is taken captive and the mind confused. Light and color are so distributed here, that you may look upon them at the same time as one and yet as different." The Court of the Daraxa is shaded by orange trees, and has a fountain brought here by Charles V from the older part of the Alhambra, the "Court of Mexuar." Beyond the Court of the Daraxa to the northeast is the Torre de Peinador, built by Yusuf I, giving an admirable view. Its upper story was converted by Charles V into the Peinador de la Reina, the "Queen's Boudoir."

The Spaniards about the middle of the seventeenth century constructed the small but attractive "Court of La Reja," named from its upper story window grilles, between the Daraxa and the Torre de Comares. In it are cypress trees, a favorite adornment of the Alhambra gardens, and a central fountain. An elaborate staircase conducts to the Hall of

the Ambassadors in the Torre, while the Viaducto, an underground passage, leads from this Court below the Sala de la Barca, over to the Mexuar. It also gives entrance to the cellars below the Torre, where the ancient palace keepers had their apartments, and to the extensive and luxuriant baths built by Yusuf I, adjoining the Court of the Myrtles. Here are halls for dressing rooms and for repose after the bath, alcoves for couches, and a gallery for singers who entertained the royal bathers. There were warm and cold baths with marble tubs, a rich mosaic flooring and beautiful fountain, while superb columns, slender and most artistic with the surmounting Moorish arches, support the superstructure. To the westward is the most ancient part of the Alhambra, the Court of the Mexuar, and the Mexuar itself on the western side of this Court, its name derived from the Arab *meshwar,* meaning a "council chamber," it being now a chapel. Here was the king's audience chamber, and adjoining it the mosque built by Mohammed V, its *mihrab*, or prayer recess, facing the southeast toward Mecca, being the most holy part. The Spaniards made the Mexuar a chapel in 1629, its altar coming from Genoa. The level of the older part of the Alhambra is considerably below that of the larger Courts of later construction.

When Charles V determined to build his Alhambra palace, he removed a large portion of the south-

western part of the Moorish structure, and here was planned a building forming an impressive quadrangle over two hundred feet square, and fifty-three feet high, with five entrances on the southern and western sides. The elaborate façade of this structure far outshines the lower and less attractive outer walls of the Moorish Alhambra buildings, though the new palace was never entirely completed, and building went on at intervals for a century. It was to have had a high domed chapel at the northeastern angle, rising above any building or tower in the Alhambra, and also a huge triumphal arch on the southern side glorifying Charles, but neither got beyond the original plans of the architects, nor was the roof entirely finished. The cost of building was defrayed originally by tribute levied on the Moors who remained in Spain, but the supply of money ran out, and subsequent Spanish sovereigns had other plans in view elsewhere. The palace is built in two lofty stories, with various rooms around a central circular court of about one hundred feet diameter. Arcades surround this court, the lower stage being of Doric and the upper of Ionic columns. To the southeast of this palace was the Mezquita Real, originally the small mosque of Mohammed III, in which the first Christian mass was celebrated after the fall of Granada, it being then made a chapel. In the late sixteenth century, however, this mosque building became insecure and was taken away and a

new church constructed on the site. To the southward is the first convent built in Granada, San Francisco, begun in 1493, the year after the Spanish possession. Here were buried the Catholic kings of Spain until their removal to the Cathedral of Granada in 1521. In the garden of the Generalife, on the higher hill, east of the Alhambra, is the Court of the Cypresses, its central pond shaded by gigantic trees of great age. Under the "Cypress of the Sultana," said to be six hundred years old, tradition tells of the tryst of Boabdil's queen and Hamet, Chief of the Abencerrages, which had so much to do with the quarrels leading to the fall of Granada.

The Alhambra is the attraction of Granada, but the city itself, while to an extent neglected and presenting evidences of decay and dilapidation, is also interesting. The capture of Granada, which drove the Moors from their last stronghold in Spain, caused the most extensive rejoicing throughout Christendom and it was marked by special *Te Deums* in the churches everywhere. It was natural that the devout sovereigns of Spain, Ferdinand and Isabella, "the Catholic kings," should desire to mark their great victory by the erection of an imposing cathedral in the Moorish capital, as the memorial of conquest. But their architects were unable to adapt the Alhambra or the mosques or other buildings in the city to the purpose, and these sovereigns died without the realization of the project. Charles

V began it, however, and laid the cornerstone in 1523, where the chief mosque stood, on the higher ground of the Segrario, alongside the Darro ravine, of the Cathedral of Santa Maria of the Incarnation, a Gothic structure consecrated, when still incomplete, in 1561. It was two centuries building, and is one of the most impressive churches of Spain. It is nearly four hundred feet long and about two hundred and twenty feet wide in the interior, the western façade having been designed to rise in two towers, of which the southern was never built, while the northern tower is constructed in three stages, Doric, Ionic and Corinthian, to a height of about one hundred and ninety feet, having been intended to rise eighty feet higher. Above the principal entrance is a large relief of the Incarnation. The interior of the cathedral is a nave with double aisles and outlying chapels, having a handsome marble pavement, decoration chiefly in white and gold, and massive piers supporting the vaulting one hundred feet above. The great Capilla Mayor, east of the nave, is nearly one hundred and fifty feet long, and one hundred and fifty-five feet high, surmounted by a lofty domed roof borne on massive Corinthian columns, having at their feet colossal statues of the Apostles, while above are paintings representing scenes in the life of the Virgin, and admirable stained glass windows. Below are kneeling figures of the Catholic kings of Spain.

On the south side of the cathedral, toward the west, is the Segrario, now used as a parish church, and occupying the site of the principal mosque of Granada, which had been the Christian church down to the time of the consecration of the cathedral. It was on the door of this mosque that the knight Hernan Perez del Pulgar in 1490 pinned with his dagger the scroll bearing the words *Ave Maria,* and the Capilla de Pulgar at the corner of the Segrario now marks the spot. On the south side of the cathedral, and east of the Segrario, is the Capilla Real, the burial chapel of the Catholic kings. This was a modest structure erected by Ferdinand in the early sixteenth century, but Charles V declared it "too small for so great glory" and had it enlarged. Here are the monuments of Ferdinand and Isabella, the king wearing the Order of St. George and the queen the Cross of Santiago; also the monuments of their daughter Johanna, and her husband Philip the Handsome of Austria, who wears the Order of the Golden Fleece, the parents of Charles, who had them interred here. The demented Johanna used to carry her husband's leaden coffin about with her in her journeyings, and a few steps descend to the vault, where this coffin is seen, and also hers, a duplicate. There are two fine reliefs in carved wood, one representing the baptism of Moors by Spanish priests, and the other, the unfortunate Boabdil surrendering the key of the Alhambra to the Cardinal Mendoza in

the presence of Ferdinand and Isabella. In the sacristy are kept Ferdinand's sword and Isabella's sceptre, crown and reliquary, the memorials of the "Catholic kings," and also her missal, which is laid on the high altar on the festival day, January 2, and the standard which the queen is said to have embroidered and which was raised over the conquered city.

To the northwest of the cathedral is the old Convent of San Geronimo, founded soon after the conquest, and now a cavalry barracks. Its church was the burial place of the famous Spanish general, who led Ferdinand and Isabella's armies, the "Gran Capitan"— Gonsalvo de Cordova. Above the entrance is his coat-of-arms, and within, the tomb of Gonsalvo and his widow Maria Mearique. The hero captured seven hundred banners in his wars, and these formerly all surrounded the tomb. There are at the altar, kneeling figures of Gonsalvo and Maria, and statues clad in full armor of four of his prominent officers. During the Carlist troubles in 1836 a mob plundered the convent, dug up the tombs and cast out the bones of the hero. When the Christians entered Granada, after their long campaign, which had been planned largely by Gonsalvo, they came by the Moorish gate south of the city, leading from the valley of the Jenil,— the Bib-onexde,— which the Spaniards afterward called the Puerta de los Molinos,— to which the road led up from the bridge

Tower of the Seven Floors, Alhambra.

crossing the river at the Bomba Mills, whence came the name of the gate. The defeated Boabdil despairingly left the Alhambra at the gate on its southern side in the upper part of the Alameda,— the Puerta de los Siete Suelos — the "Gate of the Seven Floors," then called the Bib-al-Godor by the Moors. It stood on a bastion and had very tall towers at that time, with subterranean passages and coffers, which gave the basis for some of Irving's tales of hidden treasures. Boabdil's mournful request that this gate should be walled up after his departure was granted by the conquerors. Boabdil retreated up the Jenil valley among the lofty Sierras, the snowy line of peaks marking the entire southeastern horizon, and giving the Alhambra its grandest view. The range rises in the Picacho de Veleta, 11,385 feet, and the massive summit of the Cerro de Mulhacen, the "Mount of Muley Hassan," 11,420 feet, the highest mountain in Spain. The tradition is that Boabdil, as he entered the Sierra Nevada range, southeastward of Granada, turned at a point where the road crossing the foot-hill gave the final view of Granada to take a last despairing look at the beautiful palace he was compelled to leave. His eyes filled with tears, and his lamentations were heart-rending, but his mother Aisha, made of sterner stuff, rebuked him, saying: "Weep not like a woman, for what you could not defend like a man." This place on the road is called the "Last Sigh of the

Moor," and when the unfortunate Boabdil passed beyond, there ended forever the Moorish rule in Spain, which had continued nearly eight centuries. This ending of the dynasty of Islam and the entry of the Christian, prompted Lockhart's lines in his *Spanish Ballads:*

There was crying in Granada when the sun was going down;
Some calling on the Trinity — some calling on Mahoun.
Here passed away the Koran; there, in the Cross was borne:
And here was heard the Christian bell, and there the Moorish horn.

THE BARBARY COAST

III

THE BARBARY COAST

Entering Africa—Abyla—Barbary Pirates—Morocco—Cape Spartel—The Atlas Mountains—Larache—Rabat—Casablanca—Mogador—Tangier—Moorish Life—El Islam—Raisuli—Bu Hamera—Fez—Abdul Aziz—Mulai Hafid—Ceuta—Tetuan—The Riffs—Penon de Velez—Al Mazemma—Melilla—Algeria—Oran—Tlemcen—Mansoura—Mostaganem—Algiers, the African Paris—Blidah—Ancient Numidia—Kabylia—Bougie—Philippeville—Bona—Constantine—Lambessa—Timgad—Biskra—Sidi Okba—Touggourt—Tunisia—The Mejerda—Cape Bon—Cape Blanc—Tunis—La Goulette—The Bardo—Ruins of Carthage—The Byrsa Hill—Ancient Utica—Biserta—Susa—Kairouan—Thysdros—Sfax—Syrtes Minor and Syrtes Major—Syrtica—Tripoli—Fezzan—Moorzook—Barca—Benghazi—Tolmeta—Apollonia—Cyrene—The Sahara—The Sirocco—The Simoom—Sahel—Lybian Desert—The Oases—Siwah—Fountain of the Sun—Bahryeh—Dahkel—Khargeh—Tafilet—Tuat—The Tauregs—Ship of the Desert.

ENTERING AFRICA.

From the Rock of Gibraltar the outlook southward across the Strait is upon the hills of Africa, culminating in the limestone masses of the Sierra Bullones. These hills rise in the summit of Abyla, the African Pillar of Hercules, elevated 2,710 feet and far outtopping Gibraltar. The ancient classic name of Abyla was changed by the Moors to the

Lighthouse, Cape Spartel.

of the great Sahara desert. The Romans called it Libya. It includes the Moslem states of Morocco, Algeria, Tunisia, Tripoli and Barca, and its name comes from its most ancient inhabitants, the Berbers, who were the primitive people of northern Africa, occupying the country before the Arab invasion, and from the mixed descent afterward came largely the present partially dominant race, the Moors. This Barbary coast, since the middle ages, has been best known to the world as the base for the most extensive and complete systems of piracy and brigandage that ever existed, and from this the term "the Barbary Coast" has been used as a synonym for the locale of piratical forms of business. During the sixteenth, seventeenth and eighteenth centuries, the governments and peoples of this region were the common foes to Mediterranean commerce and travel, almost their entire subsistence being the produce of piracy, either through captured property, ransoms for prisoners, or the blackmail levied on maritime nations for immunity. The piratical system, which had been previously in vogue in various ways, seems to have been first made a scientifically conducted business by the Barbarossa brothers, a couple of Greek renegades who became Moslems, and were born at Mitylene, Lesbos, in the later fifteenth century. Barbarossa means the "red beard," and these brothers who were corsairs, entered the service of Turkey and became the terror of the Mediterranean.

Arudj, the older brother, was invited by the Emir Selim Eutemi of Algiers, in 1516, to aid him against the Spaniards. He soon made himself master of Algiers, murdered the Emir, and gained headway against the Spaniards, but afterward was besieged and captured by Charles V's troops and executed in 1518. Subsequently, the younger brother, Khair-ed-Din, obtained the assistance of Sultan Selim I at Constantinople, and managed to recover Algiers. He was put in command of the Turkish fleet, fortified Algiers, and conquered Tunis and almost the whole coast, for the Turks. In 1535, Charles V retook Tunis, but Barbarossa with his stronghold at Algiers, was in full control of the Mediterranean, aided the French against Charles, ravaged the Italian coasts and defeated their admiral Andrea Doria of Genoa, making in 1543 a wholesale foray along the French and Italian Riviera shores, in which he captured many thousands of prisoners and took them to Constantinople, where he died in 1546.

The piratical methods of the Barbary powers, thus organized upon an effective system by these princely corsairs, continued practically unchecked until the early nineteenth century. Few attempts were made to oppose them by force. The more important European governments paid these pirates regular annual tributes, because this gave them the monopoly of the valuable Mediterranean trade, as against the smaller countries that could not afford to pay, and

were afraid of the corsairs. In the later period England was paying about $280,000 a year, and put the price high to prevent rival bids, the tribute being supplemented by constant concessions and presents. Part of the tribute was always demanded in armed vessels, ammunition and naval stores, so that thus in practice, the civilized nations were actually furnishing the means for plundering themselves. The ransom of captives, of whom many were taken, was usually a matter of public and private charity, and collections were frequently taken in churches for this object. Algiers was always the piratical headquarters, and in 1786 there were about twenty-two hundred captives held there. The breaking up of this system came primarily through the efforts of the United States. After the revolution, the American vessels in the Mediterranean were no longer protected by the British tributes, and the pirates began attacking them. In July, 1785, the Algerines captured two American vessels with twenty-one men, which caused excitement. Congress in 1784 had appropriated $80,000 to buy immunity, after the European plan, and various sums were paid until 1795 without satisfactory results, when Congress voted $992,463 to pay Algiers for peace and the ransom of all the American prisoners. This tribute included a thirty-six-gun frigate costing nearly $100,000 and about $100,000 more in stores and ammunition. Treaties were also made with other

Barbary states, and down to 1802 the cost had been over $2,000,000 to the United States, without securing a satisfactory result, for while the tribute was taken, the treaties were repeatedly broken. The feeling became acute, and a period of desultory warfare followed, continuing until 1815, when Commodore Decatur went to the Mediterranean with a strong naval fleet, captured Algiers, forced the Dey to sign a treaty and surrender all captives without ransom, and then compelled the rulers of Tunis and Tripoli to make similar treaties, releasing all Christian prisoners of whatever race. This energetic campaign induced England to take similar action the next year, Algiers being bombarded and twelve hundred Christian slaves released. But Tunis and Tripoli did not fully abandon piracy until 1819, and Algiers continued it in a desultory way until 1829, when France finally compelled it to cease, blockading the city and capturing it in 1830. This closed over three centuries of piracy along the Barbary coast, although the nomadic tribes of the Riff and others elsewhere, still keep up a warfare, with clandestine wreckage upon the shore and successful brigandage in the interior.

MOROCCO.

When the Arabs, in the wonderful expansion of their conquests, following the death of Mohammed,

overran the whole of northern Africa, they called the region toward the Atlantic *Maghreb-el-Aksa,* "the extreme West." From this came the name of their city in this region of Marrakesh, now corrupted into Morocco, and the name of the State. This country gives probably the best present-day exhibition of the nomadic Arab tribal system and of resultant misrule, which the Moslem lands present, in its constant feuds and changes of rulers. The interior boundary of the country of Morocco is only vague lines toward the south (the Sahara desert) and the east, bordering Algeria. The latter boundary begins on the Mediterranean at the mouth of a small stream called the Skis, and then is extended across the interior in a generally south-southeastern direction. It is well said that the southern boundaries of this rather indeterminate country, "expand and contract according to the power and activity of the central authorities." In fact, the allegiance of many of the nomadic tribes within the recognized boundaries is questionable and intermittent, while accurate information about the topography and character of the interior is scarce and defective, with little known beyond a few miles on either side of the routes that have for centuries been travelled by caravans, occasionally including Europeans. This land was the Roman Mauritania, previously first settled by the Phœnicians, and afterward controlled by Carthage. It was conquered by the Vandals upon

the downfall of Rome, and is full of Roman remains, there still being survivals of the Roman roads constructed south from Tangier. Belisarius recovered it from the Eastern Empire in the fifth century, and then came the Arab invasion. The Arabs, however, were sturdily resisted by the Berbers, who are still the inhabitants of the hilly districts of Morocco, and the more numerous portion of the population. After the seventh century, the Moorish dynasties, successively in control of Spain, were usually in power in Morocco. The Portuguese, in their colonial expansion, made conquests in the early fifteenth century, occupying a good deal of the coast, and subsequently, the Spaniards, English and Dutch secured possessions. In the later period, France and Spain have been practically the arbiters of the country, England assenting, and Germany seeking a foothold. Morocco in the earlier times of Moorish power had a much larger population than now, the estimates at present being uncertain and varying from five to seven millions of people of all races. Their universal unrest makes somewhat of a paradox, their national salutation, "May peace be in your path," and so defective is their system of agriculture that less than one per cent of the arable land is under cultivation. Morocco is, however, the great Moslem stronghold of the present time, with a virile, unruly and fanatical population, most of them animated by the hope of some day having revenge against the

enemies of Islam, and particularly against Spain, the nation which banished the Moors from Southern Europe.

Westward from the Bay of Tangier, the coast of Morocco is prolonged in the Jebel Keber, a ridge rising nearly nine hundred feet, its seaward extremity, the northwestern coast of Africa, being Cape Spartel, known to the ancients as Ampelusia, or Cotes Promontorium. Its lighthouse, which is maintained at the joint expense of England, France, Spain and Italy is almost the only one on the western coast of Morocco. Southward, this Atlantic coast extends for eight hundred miles, without picturesque feature, being remarkable for its regularity and monotonous sameness, there not being a single gulf or estuary of any size throughout its whole length, and few and only feebly marked capes. Southward from Cape Spartel the shore sinks gradually and almost to the sea level, the development of commerce at most of the small ports being retarded by the treacherous roadsteads, and the uncertainty of communication between ship and shore during some seasons of the year. There is an occasional town or ruined village of long ago along the inland hills, with a background of higher plateaus and summits off toward Fez, the capital. The interior of the country is composed largely of undulating steppes, varied by low hills, and is traversed by ranges of mountains stretching from the west to the

east, the impressive backbone of Morocco being the Great Atlas, a range about 5,000 feet high at its western extremity, then falling off, but to the eastward rising to 10,000 feet elevation, while beyond the lower Pass, sixty miles from the sea, which leads from the City of Morocco, it rises to 11,500 feet. Farther east there are other passes and low parts, and then it culminates in peaks rising 13,500 feet. Snow remains as late as June on some of the higher Atlas summits. Pliny said that in his time the people called these mountains the Dyren, and they are still the Daren of the Berbers. Viewed from the lower regions at the northward, the Atlas range presents an impressive and august appearance, apparently rising in abrupt and even steep ascents, but actually the slope from base to summit on that side is about fifteen miles. These mountains are the source of a generous rainfall, and the Moroccan proverb is that "Famine never comes with wet feet." The Morocco rivers all rise in the Atlas mountains, their summer current (the dry season) being comparatively feeble, but the rains of winter and the melting snows of spring make streams of great volume as shown by their broadened beds. The best known river is the Muluya, which the French are anxious to make the western Algerian boundary. This was the ancient Mulucha and Melva, to which Pliny refers, but its course has been only scantily explored. Pliny also referred to the Tamuda, which

Ptolemy called the Thaluda, and this is now the Martil, flowing into the Bay of Tetuan. As not more than a hundredth part of the available surface of Morocco is cultivated, it is still true as quoted by Addison, that the Moors "seldom reap more than will bring the year about." Thus the failure of a single harvest usually makes a famine. In the primitive transportation methods of the country, the patient camel is the chief beast of burden, though some mules and asses are thus employed, but the sympathetic Arab and chivalrous Berber never puts his noble horse to such base uses as carrying a pack, and he thoroughly despises a railroad.

THE ATLANTIC SEABOARD.

As there are no railroads in Morocco, the ancient caravan routes from the interior which have existed from time immemorial have their outlets at various small and generally indifferent ports on the Atlantic coast. Under the Algeciras Convention, all these ports, as well as those on the Mediterranean shore, are in French and Spanish control. The first port beyond Cape Spartel is Larache, held by the Spaniards. This is about forty miles southwest of Tangier, at the mouth of the Wadi el Khos, and was the ancient Lixus, there being remains of a Phœnician settlement. It was here that some of the old time chroniclers located "in the remote West and beyond the Pillars of Hercules" the island and

garden where that hero got the golden apples of the Hesperides. Near the mouth of the river is a narrow island, about six hundred feet long, and for centuries this was the abiding place of a daring horde of Barbary pirates, against whom the Austrian warships were sent in 1829, destroying the settlement and the last pirate fleet of Morocco.

A little way farther is Rabat, held by the French, and the special port of Fez. To this place in September, 1907, the then Sultan, Abdul Aziz, made a journey at the head of his army, over the desert from Fez, not having ventured outside his capital for five years previously. This enabled his brother, the rival Sultan, Mulai Hafid, who had been previously proclaimed in Southern Morocco, to get possession of Fez. Mulai's supporters were opposed to the European control and innovations, and hence their revolt. Abdul Aziz abandoned his capital and came to Rabat really for the protection of the French warships, upon which he depended for maintaining the semblance of power. Here he remained several months, making occasional incursions against hostile tribes in the interior, and in the summer of 1908, being emboldened by some temporary advantages gained in skirmishes, he marched out to oppose Mulai Hafid, whose forces were some distance southward toward Marrakesh, (Morocco City). In August he met the enemy, but in the most surprising way, though not unusual in Moroccan warfare, his

forces nearly all deserted to Mulai, leaving him with only a handful of adherents, and then Mulai was proclaimed as Sultan at Tangier and elsewhere throughout the country. Abdul Aziz in a few days accepted the situation, disbanded his forces, and told them to go whither they willed. Thus the sovereign was changed, and Mulai was generally accepted as Sultan by the European Powers, as he promised obedience to the Algeciras Convention, and the protection of Europeans. His heritage from Abdul Aziz was an empty treasury, about $30,000,000 of debts, and a restless and turbulent country through the rivalries of the tribal chiefs in different localities. One correspondent, writing from Tangier, significantly described the situation: "Abdul Aziz inherited a throne: he has left his successor a footstool with all the stuffing taken out."

At Rabat the river Burckrag, coming down from the mountains, makes a sort of bay at its outlet, with an indifferent harbor, and here was made on the bluff shore a settlement known as early as the thirteenth century, and which long was notorious as a nest of pirates. Beyond, down the coast, is Casablanca, now under joint French and Spanish control, and farther southwest are Mazagan, Saffi and Mogador, under French control, the latter being the seaport of Marrakesh. In the summer of 1907 the frequent outbreaks caused French and Spanish warships to be sent to all these ports, their guns con-

trolling the wild tribes that since have shown a more peaceful inclination after the severe treatment some of them received.

Casablanca, the "White House," is a town of about seven thousand people, having a poor harbor that is being improved by building a protective breakwater for which Europeans provide the funds. Abdul Aziz, after his sudden downfall, came here in September, 1908, bringing his harem and a small retinue, and settling on a farm outside the town under French protection. During the outbreaks attending the rivalries of the two Sultans, this place was very turbulent. The Moors generally hate the Jews, who are the leading traders at the Moroccan ports, and in April, 1907, a Portuguese Jew was killed at Casablanca by a negro in the pay of a Moor, the murderer receiving for his crime an amount of money equivalent to about nineteen cents. Efforts were made for punishment, and there began a period of disturbance, resulting in a raid into the town in July by various unruly Arab tribes from the interior, who wished to exterminate the Jews and other traders, drive out the Europeans, and stop the harbor improvements. They massacred nine foreigners, mostly Frenchmen, and the result was a visit by the warships and bombardment and partial destruction, early in August, 1907, of the Arab town, over a thousand being slain, and the French troops

landing and establishing a fortified camp. There were fierce and almost constant Arab attacks throughout August and early September, and the troops might have been driven into the sea had not the ships' guns defended them, cutting off the raiding parties with great slaughter. The picturesque Arab cavalry, mounted on their superb horses, galloped in repeated charges, waving their weapons and chanting texts from the Koran, but while their bullets wrought havoc among the French soldiers, yet the well-aimed shells from the ships always ploughed through the Arab squadrons and broke up these charges. Mazagan, farther down the coast, was also bombarded and seriously damaged in August, 1907, to punish outbreaks against the European residents. Casablanca since has been generally quiet. Soon after Abdul Aziz arrived here, however, in September, 1908, there was a disturbance of a new character which came near embroiling Europe. On September 25, six soldiers of the French foreign legion that was holding the town, deserted, and two, being Germans, secured protection from the German Consul, who sent them aboard a German vessel in the harbor. The French would not stand for this, but seized them while being taken to the German ship, and they were confined in a French prison. This made a great sensation, producing an ugly feeling both in Germany and France, but the tension was gradually

relieved. Abdul Aziz, in the latter part of 1908, became reconciled to his brother Abdul Hamid, and thereafter made Tangier his home.

Mogador, or Sairah, is the best Moroccan port on the Atlantic coast, being behind a small island which protects the roadstead. This was an early settlement of Portuguese traders who built a fort on the bluffs along the shore, surrounded by sandy lowlands overflowed by the sea at high tide. This is the seaport of Marrakesh which is about one hundred and thirty miles inland. Mogador, coming under Moorish control in the eighteenth century, was enlarged and fortified with walls and towers, and is really two towns — the Citadel, inhabited by the Moors, and the Mellah, which is the Jews' quarter. In the Citadel are dungeons, where in times past the Sultan's political prisoners have been confined. This port was placed under control of the French by the Algeciras Convention. It was here that the unrest and general disturbance prior to the 1907 outbreaks led to the first proclamation of Mulai Hafid as a rival Sultan, he getting a sort of allegiance from the wandering tribes of the western coast engaged in the outbreaks. Mulai to strengthen himself at once married four wives, and stopped the Jewish persecutions, preferring to take their tribute. About the same time Bu Hamera, called El Roghi, the "Pretender," claiming to be Sultan in Eastern Morocco, who for years had enjoyed a sort of authority, again

became active; and Raisuli, the "Rob Roy of Morocco," resumed his spectacular brigandage, so that this peculiar country had four rival rulers, in different localities, with numerous smaller chieftains of nomadic fame, holding temporary sway in various regions, so long as some stronger force did not come along and capture them or drive them out.

A MOSLEM TOWN.

The bay of Tangier, while a rather indifferent harbor, is by far the best roadstead possessed by Morocco, and hence Tangier has become its chief commercial town. The port is in a most picturesque situation, upon the hills of the western margin of the shallow semicircular bay, and it is one of the oldest settlements in the world, the Tingis of the Roman time. The white houses are surrounded by a wall with ancient towers and gates, the Kasba, or Citadel, rising on the highest elevation. It is a thoroughly Moslem town, and the nearest place to America and western Europe, where the oriental civilization may still be seen unchanged and unadulterated. What has to be largely imagined in the former Moorish lands of Cordova and Granada, is seen in present reality in Tangier and Morocco. The brief journey across the Strait from Gibraltar puts the visitor in the midst of Islam. The approach is beautiful; a white town, occupying the sides of two hills, one projecting boldly into the sea. The

battlemented walls rise from the narrow beach along the shore, and mount the tops of precipitous rocks. Some batteries display guns frowning over the harbor, and above are the terraces forming the town, everything being dazzlingly white, though here and there a green tree appears as if to make the whiteness more impressive. The high minaret of the chief mosque, curiously painted, is in front, with a banner flying at the top. Away toward the east run off the hills of the Bullones, culminating in the distant Jebel Musa, while to the westward rises the breezy elevated plateau of the Marshan, its eastern verge being the Kasba, and the surface occupied by pleasant villas and a large cemetery, having near it the remains of old Phœnician tombs cut in the living rock. The plateau boldly culminates in the sea-viewing hill known as Mount Washington, from which there is the grand prospect across the Strait that Browning tells about in his *Home Thoughts From the Sea*:

Nobly, nobly Cape Saint Vincent to the northwest died away;
Sunset ran, one glorious blood-red, reeking into Cadiz Bay;
Bluish 'mid the burning water, full in face Trafalgar lay;
In the dimmest northeast distance dawned Gibraltar, grand and gray;
Here and there did England help me: how can I help England? — say,
Whoso turns as I, this evening, turn to God to praise and pray
While Jove's planet rises yonder, silent over Africa.

Farther westward, about nine miles from the town, is the promontory of Cape Spartel. A rough mule path leads thither and it displays a beautiful landscape of rock and ocean, with moorland inland, stretching off to a horizon of mountains.

In Tangier is seen the home life of the Moor. The narrow and uneven streets are impassable for wheeled vehicles, and scarcely afford room for the camels and beasts of burden. The one-story houses, their rooms all facing on small interior courts, present only bare walls to the streets, although they are gradually being replaced with taller and more modern structures constructed by Europeans and generally in Spanish style. There is a great attraction in wandering through these narrow, crooked streets and getting glimpses through the half-opened doors leading directly into the living and work rooms. Then the street crowds display the solemn, monk-like Moors, stalking by in white or colored robes, brilliant fez or turbans, and yellow slippers; the swarthy Jews in sombre black; the Kabyles from the Berber villages; the negro slaves from the interior; and the white muffled figures of the women. From the first morning call of the *muezzin* to prayers, the town is busy as a swarm of bees, especially down by the harbor and in the market-places, and everything that is done has to be accompanied by a vast amount of yelling and apparently of quarrelling. But the

streets are filthy, there being no sanitary arrangements, and the place is redolent with unsavory odors, though not unhealthy, for its magnificent climate has made it a health resort, which attracts many who avoid these drawbacks by living in the suburbs. The shipping lie off the port and most of the cargo has to be lightered ashore. There is a pier, but it is a modest affair, only recently constructed for the use of small boats which bring the passengers from the outlying steamers. Before it was built, the passenger was conveyed from the boat to the beach, usually on the back of an industrious Jew, for it is well known that no Moslem will demean himself by carrying an infidel, even for "baksheesh." Scattered over the harbor surface are many feluccas, as the native boats are called, the sea waves tossing their three-cornered sails from side to side. There is little done in Tangier to attract the visitor, it having neither theatres, casinos, brilliant cafés nor bands of music, as at most watering places; but the population presents a variety show of infinite interest, and in the market-places, catering to the crowds, are jugglers and snake charmers; story-tellers and a breed of most importunate beggars; camels and asses; fierce-looking coast pirates from the Riff, having the single long lock of hair by which they expect to be hoisted into Heaven when the resurrection comes; and a great conglomeration of all kinds of people, most of whom on the smallest pretence clamor

Entrance to a Mellà, or Jewish Quarter.

for the universal tribute of all Moslem lands, the "baksheesh." There is nothing like it seen in western Europe, and as no such thing as either local government or police supervision is dreamed of, outside of a sort of vague consular protection for visitors who get into trouble, the condition may be imagined. Blondin is said to have once remarked that walking on a tight-rope is easier than getting through this kind of streets. At the same time it is these very things that make Tangier a favorite haunt of artists and travellers in search of the picturesque and curious.

The Kasba, rising about four hundred feet above the town, is the principal structure, a citadel of the fifteenth century, but now only a group of unimpressive and dilapidated buildings. There are included a mosque and the Governor's residence and prison. Some of the rooms imitate the Alhambra decorations, and the Pasha's Harem is visited sometimes by ladies, who ingratiate themselves with the inmates by presents, usually of candies. The Great Mosque is not far from the harbor, and on the southern side, its tower built in Giralda-like architecture, and having a handsome entrance. The town has few other attractive buildings. Originally Tangier was a Phœnician settlement, and grew in importance under the Roman domination. It fell into Arab possession about the year 700, and was their capital of the extreme western province of the

Damascus caliphate. Portugal got possession in 1471, and England in 1662, when it came as part of the dowry of Catherine of Braganza, wife of Charles II, but the English abandoned it in 1684, since which time the government of Morocco has nominally controlled it. The present somewhat antiquated fortifications are of Spanish construction. The German Emperor William recently set longing eyes upon it, and made a flying visit in March, 1905, the Moors giving him a rousing welcome, and the Sultan of Morocco sending his band from the capital to lead the landing procession. William found in Tangier a noble looking Moor, nearly seven feet tall and large in proportion, and this Moor he took away as a trophy to Berlin, where he joined the company of tall soldiers in the First Guard Regiment, and carried the bell-tree for the band at a salary of five cents per day.

Among the suggestions made to the visitor who first ventures among the Moslems are these: Do not exercise yourself about the care of your animal or servant, or ask unnecessary questions. Never under any circumstances point at a man with the finger; or ask after your host's family; or blow out a light — it should be extinguished by passing the hand rapidly over it. Staring at a Moor when going through his devotions must also be avoided, as the Moslem regards this as an insult. Never in asking for a light for a cigar use the literal expression " Give me

a light," for this Arabic phrase is *Djib lee ennar*, and the word *ennar* also signifies "hell," so that the consequences may be imagined. The proper phrase is *Djib lee afia* — "Give me peace." Photographing and sketching shock the Arab's religious prejudices, and sometimes, especially if the sketch is of a mosque, rough treatment may follow. A very calm and impassive demeanor is recommended, as this evidence of dignity is impressed upon the Moor.

The religion of the Moors — Mohammedanism, or as they call it, "El Islam,"— is based upon the fundamental principles that "There is but one God" and "Mohammed is his prophet;" and the era of Islam dates from the Hegira, or the Prophet's Flight to Medina, in the year 622 A. D. They believe that God sent six great prophets into the world — Adam, Noah, Abraham, Moses, Jesus and Mohammed — the last, in their view, having been the greatest. Each of these prophets, they hold, represented the will of God for a certain dispensation, and each in turn was superseded. The Jews therefore they recognize as having been true believers from the time of Moses to Jesus. They deny, however, that the existing versions of the books of Moses, the Psalms and Gospels, are authentic, only the Koran they say having come down unaltered from its first composition, though this as an actual fact is doubtful. The Moslems accept the doctrines of

future reward and punishment and the immortality of the soul; but the more enlightened among them regard figuratively the descriptions of the joys of Heaven as depicted in the Koran. The admission to Paradise is got, not by merit, but by the mercy of God and by his absolute decree, and they believe generally in predestination, holding that some are elect to eternal happiness, whom they call *welees,* or "the chosen." The result of their belief in predestination is that in times of distress the men display exemplary patience, and in affliction a remarkable fortitude. There are, strictly speaking, no priests in the mosques. The chief religious officer attached to a mosque is the *Nasir* or Warden, who is trustee of the endowments, and appoints all the other officials. These are the *Imaums,* who lead the services, the *Khatebs* who preach on Friday, the Moslem Sabbath, and the *Muezzins* who sonorously chant the prayer calls from the minarets.

Almsgiving, fasting, prayer and pilgrimage, with frequent purifications by washing, are scrupulously enjoined upon all true believers by Mohammed. Yearly, in the month Ramadan, the great fast is held, but as the Moslem year is only 354½ days, this and other fasts and feasts constantly shift. Prayer is always preceded by ablutions, as prayer is not accepted from an unclean person. It is proper to lay a carpet on the ground when praying, and these rugs or carpets the faithful carry with them,

and the dress should also be clean. The Moslem entering a mosque leaves his shoes outside, performs his ablutions at the water basin in the court, if not already purified, and then turning toward Mecca — the direction being indicated by the prayer recess in the wall, performs his various prostrations and orisons. On Friday, the reading chair and pulpit are brought into use; portions of the Koran are recited, and a sermon is preached by the *Khateb,* who sits on the top step of the pulpit stairs. In the intervals of prayer on Fridays, the faithful may transact worldly business. Every day the devout Moslem has five periods for the repetition of prayers; First, *Maghreb,* a little after sunset; second *Asha,* nightfall, about an hour and a half after sunset; third, *Subh,* daybreak; fourth, *Duhr,* midday; and fifth, *Asr,* afternoon, about three o'clock. These periods of prayer also serve to mark the divisions of the day, which begins at sunset. The sonorous call of the *muezzin,* however, suffices for the prayer of most of the people, which they repeat after him. This call, in the Arabic, when translated is "Allah is Great!" repeated three times. "I testify that there is no God but Allah, and Mohammed is the Prophet of Allah!" repeated twice; "Come to prayer!" repeated twice. In the desert, where water is unobtainable, the faithful are permitted to use sand for their ablutions. The worshipper, facing Mecca, begins by holding his

hands to the lobes of his ears, and then a little below his girdle, and as he recites passages from the Koran, he pauses to make repeated prostrations.

The great fast in the month of Ramadan is scrupulously observed, from daybreak to sunset, all eating and drinking being prohibited, and the most devout even avoid swallowing their saliva. There are prolonged repasts in the night, as a compensation. Many offices and shops are entirely closed during this month, which is a lunar cycle. Almsgiving is a religious duty, certain alms being compulsory and others voluntary, but considered highly meritorious. The pilgrimage to Mecca is the fourth great duty, which all good Moslems try to make at least once in their lives, though this is very difficult from a country as distant as Morocco. The boys are sent to school to read the Koran, but general education is scant. The girls are not sent to school, nor is their attendance at Mosque regarded as essential or even desired, and from most mosques women are excluded. They are commanded however to visit the tombs of their deceased relatives, and keep them in repair. The Moslem believes that the spirit of every true believer goes to a place of happiness, to await the resurrection; when reunited to the body, it will enter into Paradise; and in the meantime the soul every Thursday visits the grave of the body. For this reason many females go on that day to the cemeteries, and commune with the spirits of the dead

as though actually present, telling them all the news and family gossip. The Koran says in the 43d verse of the 40th *Surah* (chapter) "Whosoever performs good works and believes, men as well as women, shall enter Paradise." The pilgrimage to Mecca is undertaken in the last month of the Moslem year, called *Dhulhijjeh,* or "the month of the pilgrimage." This event culminates at Mecca in a great sacrificial feast, when sheep are slaughtered, and this feast, called the Great Beiram, is observed in all Mohammedan countries. The Moslems have the worship of saints at their tombs, the same as at the tomb of Mohammed at Medina in Arabia, and there are few towns which do not have such shrines.

The Koran was a revelation of supernatural origin to Mohammed, whose name means "the praised." He was born about 570 A. D., and before reaching his fortieth year had a dream on Mount Hira, near Mecca, which gave him the original impulse to oppose the vanity of idolatry. His first converts were in his own family, and in 622 A. D. they migrated to Medina, where the new religion made great progress. The name of Koran means the "rehearsal" or "reading," and the first revelation vouchsafed him, was on what he called the "blessed night" in the year 609, and the revelation of the book continued, with interruptions, for twenty-three years, until the whole of it, which had already existed

on the "well-preserved table in Heaven," had been communicated to the prophet. It is divided into parts or chapters called *surahs*. The Koran is regarded as the masterpiece of Arabian literature, and the Moslem prayers consist almost entirely of the recitation of passages from it. The translation of the Koran is prohibited, and therefore in other lands than where the Arabic language is spoken, it is taught the children entirely by rote. Mohammed built the first mosque at Medina, in a yard planted with date trees — a square, capacious structure with brick and earthen walls, the trunks of the date trees being the columns supporting the roof which was a thatch of palm leaves. There were three doors, and Mohammed was buried nearby. This was afterward replaced by a larger but similar building, the *Mesdjid-en-Neky,* or "Mosque of the Prophet," which became the model for all mosques. The minaret for the *muezzin* was added about a half century after the Hegira. There are two classes of mosques: those of rectangular form, where the court is surrounded by arcades of columns; and those where the court, whether rectangular or cuneiform, is surrounded by closed spaces. The larger, or cathedral mosques, where sermons are preached on Friday and prayers offered for the sovereign, are called *Jami.* Each of these has a court of considerable size, usually uncovered, in the centre being

the fountain for the ablutions. Adjoining the east side of the court is the *Maksura,* covered with carpets or mats, and containing the holy vessels. In the *Maksura* is the *Mihrab* or prayer recess facing towards Mecca, called *Kibla;* the *Mimbar* or pulpit to the right of the *Mihrab,* from which the preaching is done; the *Kursi* or desk on which the Koran lies open during the service (being kept at other times in a cabinet); and the *Dikkeh,* a pedestal on columns and enclosed by a low railing, from which the assistants repeat the words of the Koran for the hearing of those at a distance. There are also various lamps. Adjacent to the *Maksura* usually is the monument of the founder of the mosque; while alongside the larger court is a smaller one with a central basin, this generally being entered first by the worshipper. The Moslems also perform their devotions at the grated windows of the mausoleums of their saints, called *Weli.* Within is seen a catafalque covered with bright-hued carpets, although the saint's remains may not be there. These *Welis* are numerous in all Moslem countries, being sometimes built into the houses. They are dome-covered and cubical in form and generally whitewashed. Most mosques have considerable endowments for purposes of benevolence, education and piety, and while unadorned by paintings or sculptures, like the Christian churches, yet the Saracenic art is invoked

to attain elegance of decoration in form and color, although Islam is a foe to all representations of living creatures.

Many are the revelations and proverbs attributed to the prophet. One of the most significant describes the devastation of the locust, yet indicates its limit. The Arabs tell us the locust thus addressed Mohammed: "We are the army of the Great God; we produce ninety-nine eggs: if we produced a hundred we should consume the whole earth and all that is in it." A locust actually lays more than a hundred eggs, and multiplies amazingly, yet here is indicated the limit to its enormous progeny, which saves the earth from devastation.

THE MOROCCAN CAPITAL.

There are few Europeans in Morocco, outside of Tangier and the other coast settlements. The Arabs are proud of this, and they often speak of Tangier as "the city afflicted of Allah with dogs and infidels." To go into the interior, the visitor has to travel with guides and tent equipage, and the journey also requires guards, for there is risk from the nomadic brigands who wander over the country and are not content alone with "baksheesh." It was in 1905, that the American citizen who resided in a beautiful villa on the mountain at the western verge of Tangier, Ion Perdicaris, was kidnapped with his stepson from the villa itself, and carried off by a band of brigands

under the leadership of the picturesque outlaw, Raisuli, and taken into the interior. The prisoners were treated all right, being held for ransom, and Perdicaris described his captor as "a man of indomitable courage, with polished manners and cultivated mind." All sorts of threats were made to secure release, and an American fleet of warships was sent to the Moroccan coast, while the English, French and United States Governments used every pressure, but the enterprising brigand made his point and did not release the prisoners until the demanded ransom $70,000 was paid down by the then Sultan Abdul Aziz, who also sent to Raisuli the appointment of Governor over the nomadic tribes that wander in the regions between Tangier and Fez, the northern capital, where that Sultan had chiefly resided until he went to Rabat in 1907. Fez is distant about one hundred and seventy-five miles southeastward from Tangier.

Raisuli would have been an impossibility in almost any other country than Morocco. He is Mulai Ahmed ben Mohammed er-Raisuli, born about 1866, a Shereef, or direct descendant of the Prophet, who received an excellent education in religious law and the Koran at Tetuan, and when he came to manhood, took up the lucrative, adventurous and somewhat risky trade of a cattle-robber. This is a calling by no means despised in Morocco, but it requires courage, of which he has plenty. He soon became celebrated,

he and his band earning much money and liberally spending it. But the cattle-stealing led to other crimes, and murders followed, life being held cheaply in this wild country, and the dead soon forgotten. But on one occasion, another Shereef, who had married his sister, proposed to take a second wife, which Raisuli could not prevent, and on the night of the new marriage, amid the festivities, Raisuli and his men entered the house and murdered the bride and her mother. His crimes became so notorious that the Sultan ordered his arrest, and he was sent to the dungeons of Mogador where he remained in chains nearly five years, once escaping, but being recaptured in a few hours. Ultimately released through a friend's intercession, he went to Tangier to live peaceably, but found that his property had been confiscated, and being unable to recover it, he resumed his old profession and became a brigand, capturing anyone whose possession gave hope of ransom. He is tall, robust, handsome, with very white skin, black eyes, short dark beard and mustache, eyebrows that form a straight line across the forehead, a cruel mouth, and a Grecian rather than Semitic profile. His voice is soft and low, his expression sad and his manner quiet and charming, but to his followers his demeanor is usually haughty.

After the Perdicaris release, Raisuli became a despot and his actions were almost unbearable. He was a strong Governor, but he overdid it, disregard-

ing all treaties, blackmailing everyone who could be reached, and becoming so intolerable, that at the request of the European representatives, who were seconded by a formidable fleet of warships in the Bay of Tangier, the Sultan was compelled to remove him from the Governorship at the close of 1906. But the resourceful bandit bided his time. He retired from Tangier to the mountains to the eastward, started another negotiation to try and make an arrangement for pardon, and thus induced the chief adviser of the Sultan, the Englishman, Kaid General Sir Harry McLean, to come to him for consultation. When McLean came in July, 1907, Raisuli promptly made him a prisoner, took the horses and tents that were sent as presents, and then demanded for McLean's ransom $200,000, the rebuilding of his house which had been burnt, his reappointment as Governor, and the additional post of Commander of the Police of Tangier. McLean was a British army officer, the virtual commandant of the Sultan's forces, and the most influential man in Morocco, so that his capture was the bandit's master-stroke. It was said, however, of Raisuli, that after the manner of his imaginative race "he begins by asking for the moon, but would be content with a few of its beams." The Moroccans could do nothing with him, and then the British Government took up the negotiation for McLean's release, Raisuli finally restoring him to liberty for what might be regarded as very substantial moon-

beams. After seven months' captivity, in February, 1908, the prisoner was brought back to Tangier and liberated. Raisuli, as the result of the negotiation, secured $100,000 ransom, and fifty-six of his adherents who had been captured in various raids were restored to him. The British also guaranteed protection to Raisuli and twenty-eight of his relatives, who had got into trouble. To insure the future good behavior of the bandit, however, $75,000 of the ransom remained in bank under British control, but Raisuli is paid $250 monthly interest on this fund. Since the adjustment he has been peaceably disposed and Kaid McLean returned to England. After the accession of Sultan Mulai Hafid, Raisuli presented him with $25,000 of the British ransom, thus getting the new Sultan's friendship, who made Raisuli the Governor of Djebala Province, controlling about a dozen Arab tribes in northern Morocco, in the spring of 1909.

When Mulai Hafid was first proclaimed in Western Morocco as a rival sultan to his brother Abdul Aziz, he at once liberated all the political prisoners Abdul had incarcerated at Mogador and Morocco City, declaring he would oppose any concessions to Europeans. His financial necessities, however, soon caused him to change this unfriendly policy. Mulai's other rival Bu Hamera had been in evidence for several years. This Pretender, known as El Roghi, claimed a divine inspiration, calling him-

self El Moghreb Bu Hamera, which may be translated as "the patriarch who rides upon a she ass." He secured a strong foothold in Eastern Morocco, getting great influence over the Riff tribes of the Anjera district east of Tangier, who usually are at war with the Europeans and Moors alike. He had always aspired to the Sultanate, and in the summer of 1909 marched inland to capture Fez and dethrone Mulai. Several conflicts were fought outside the walls without positive result for either, and in July, El Roghi made a close siege, forcing his way into the city and pillaging the shops. But one of those curious changes, so common among these people, came in August, El Roghi was defeated and fled, but was captured and brought into Fez, being taken through the streets confined in an iron cage strapped on the back of a swaying camel. He sat erect, disregarding the popular jeers, and was conducted into Mulai Hafid's presence, who closely questioned him about his crimes and his property and then had him confined in a dungeon in the palace. There followed a series of horrible tortures, to mitigate which El Roghi gave up all his treasures that had been placed in European banks, but in vain. Some fifty decapitated heads of his followers were displayed in public places about Fez, as a warning to rebels. El Roghi himself was thrown into a den of wild beasts and horribly wounded, and on September 12 was slain in the presence of the Imperial harem. In-

tervention by the foreign representatives stopped further cruelties.

Several years ago, when some roving bands of the Anjeras helped Abdul Aziz's troops capture a party of Raisuli's horsemen in the Riff region, that astute brigand heard that the correspondent of the London *Times* had gone out of Tangier on a shooting expedition, and swooping down out of the hills, captured him. There was a great commotion caused by this coup, the British warships were again invoked, and Raisuli was given back sixteen of his captured followers as a ransom for the correspondent.

Valiente is another picturesque bandit who wanders and robs at will throughout the country, being related to the Anjeras. He had thirty-six wives, and Madame du Gast, a French lady fond of adventure, sometime ago visiting Morocco, says that he offered them all to her as slaves if she only would marry him. She describes Valiente as "a most adorable bandit," adding that all of the thirty-six ladies were presented for personal inspection, and immediately prostrated themselves before her, imploring her to stay and rule over them. Valiente on account of his numerous robberies and murders was complained of by the Europeans and Sultan Abdul Aziz had him imprisoned. Soon afterward, however, the Anjeras captured two British officers, and to ransom these Valiente was liberated. When the German interest in Morocco became acute in

1905, their bankers made a loan of $2,250,000 to Abdul Aziz, and his first investment of the money remitted was to send $3,000 to Egypt to bring a party of dancers from Alexandria to install in his palace at Fez. In 1907 he had to pawn his jewels and the crown regalia at the Mont de Piete in Paris to raise $240,000 for repayment of loan charges, and these gems were put up for sale in December, 1909, but Mulai Hafid redeemed them in January, 1910 at a cost of $300,000 including interest, stopping the sale. Thus is gotten some idea of the strange sort of government Morocco enjoys. The French government in 1910 arranged to make a loan of $16,000,000 to Mulai Hafid, to repay his pressing debts including $12,000,000 Casablanca indemnity, and will be reimbursed by the customs and other revenues.

There has been very little European travelling into the interior of Morocco since 1906, the disturbed condition of the country preventing it. Under ordinary circumstances, formerly, detachments of Moroccan soldiers were provided as guards for visitors journeying into the country, and the traveller always had to obey the government requirement to abstain from going into assemblies of Mohammedans engaged in their religious observances, and was thus excluded from the mosques. The journey from Tangier to Fez, the one most frequently taken, occupies a week. This is the largest city of Morocco, and

its most important interior community, with hardly a dozen European residents, out of a population approximately of a hundred thousand. It is a real oriental city and as yet entirely untouched by European influences.

The great plateau forming Western Morocco comes up to the Atlas mountain range, and through it the river Seboo flows out of the mountains to the Atlantic. On the eastern edge of this plateau, Fez is situated, in the valley of a little affluent, the Wad Fas, composed of two streams uniting in the town, and then dashing down the deeply indented vale to the Seboo, about six miles away. Sultan Muley Edris, who lived in the ninth century, was the founder and patron saint of Fez. He came along with his caravan one day, and halting in the picturesque valley, decided to make it the site of his capital. So he turned the first sod, and as he did so, said "Here I plant my hoe." The Arabic word *Fas* means a hoe, and thus came the name of the Moorish city Fas, which we know as Fez. The tedious journey across the country from Tangier is without much interest, unless the brigands may be about, and as the capital is approached, the route is over a level grain-growing district, with the rugged foot-hills of the Atlas range to the southward, and behind them the unexplored snow peaks that are its higher summits. Then a long line of gray walls, marked by battlemented towers, appears, having

within the white buildings of the Sultan's Palace and some tall minarets of the mosques. These walls are dilapidated, about four miles in circuit, and the route comes to an end at the Bab Segma, a rather unpretentious archway in the walls, which is really the main entrance gate to the city. Here lived until 1907 the recently deposed Sultan, Muley Abdul Aziz, who was born in 1879 and ascended the throne of his absolute empire in 1894, while yet a minor. He is of the Shereefian race, a descendant of Mohammed.

Another gateway to the right, in the wall where it adjoins the palace gardens, leads out to the Msala, one of the sacred places. Through this gateway the Sultan passes on the great religious days, to pray at the Msala on the hill-slope, a short white-topped wall with a *mihrab* or prayer recess facing the east, toward Mecca. Then, standing alone, costumed in white, the Sultan leads the prayers of the faithful, congregated around by thousands, they and their horses clad in the gaudiest hues of the rainbow. A recent visitor to Fez, describing some of the peculiarities of Abdul Aziz, said he was very fond of jewels, for which he paid fancy prices, and was anxious to accumulate various things which he regarded as representing modern progress. For this reason he went in for gold-handled bicycles, cameras and hansoms, motor cars and grand pianos. He had about two hundred bicycles in the palace including

many of most expensive make, with gold and silver fittings. He was a great trick rider on the bicycle and delighted in riding at full speed up narrow inclined planks. He is an excellent piano player but a very reckless motor driver, and has had some serious mishaps. He was very much determined in collecting taxes, as he was always in debt, and he would go out with his troops to enforce the payment. He had a short way of dealing with tax-resisters, whose heads were promptly cut off. He is a strict Mohammedan, keeping all the tenets of the faith, and neither smokes nor gambles. A pack of cards he regarded as belonging only to the infidel, and he would not touch them. He was a very early riser, going first to the mosque and then consulting his ministers, and after a meal taking a short siesta before receiving visitors. He is amiable, kind and friendly, but was regarded as too weak to be a good ruler in time of emergency.

The oldest brother of Abdul Aziz, Prince Muley Mohammed the "one-eyed," should of right have followed his father Mulai Hassan upon the throne. But through the machinations of Abdul's mother, a favorite Circassian slave, he was supplanted. The ancient tradition of Morocco was that a one-eyed ruler was to be the restorer of all the former glory and greatness of the Moroccan throne. Abdul throughout his reign kept Muley a close prisoner. After Abdul left Fez, for Rabat, it looked for a while as if Muley Mohammed might be enthroned,

but the Ulemas of El Islam met and were induced to declare that the younger brother, Mulai Hafid, had more legal and actual right to the throne than either Muley Mohammed or Abdul Aziz. The result was that Mulai with his forces took possession of Fez without serious opposition, and the one-eyed brother was kept in prison. This continued until January, 1909, when he mysteriously died, with rumors of poisoning. Mulai Hafid sought earnestly to get recognition from France and Spain, and promising everything required, ultimately secured it. Upon his proclamation, he at once married another wife, and announced that European innovations, such as automobiles, bicycles and the aggregation of stuff which Abdul Aziz had collected were no longer to be tolerated. These, which had cost so enormously as to help to bankrupt Abdul, Mulai proceeded to destroy in order to get room in the palace where they had been stored. The Sultan's crown and jewels, which Mulai diligently sought, were gone however, for Abdul as already stated had sent them away to pawn for the German loan.

Fez is much crowded, there being an "old" and a "new" town, both of them ancient, and both having narrow and dirty streets, while the houses are generally of brick with galleries and flat roofs. The city formerly had several hundred mosques, and still contains about one hundred, two being quite large. The chief mosque was founded by Sultan Muley

Edris and is his shrine as a saint, being also for this reason a sanctuary for criminals. The other large mosque, El Kairuin, has the unusual adjunct of a covered court in which the women pray. In the sixteenth century, Fez was a famous seat of Arab learning and it has a University called the House of Science, with colleges and schools, and a library of rare manuscripts, among which are said to be the lost books of Tacitus. On account of its abundance of mosques and sacred relics, Fez is the holy city of the Western Arabs. It is also a centre of the caravan trade, these camel processions going and coming across the Great Desert, many of them to Timbuctoo, a route requiring about five months for the round trip, beginning usually in March and October. The city has some profitable manufactures, and particularly makes the bright colored woolen caps, called "fez," which are dyed red from the juice of a berry found nearby. The finest red morocco also comes from Fez, and it has skilful artisans in goldsmith's work and jewelry. Its caravans collect from the interior, for export, gums, ivory, spices, ostrich-feathers, and similar articles, and the city has many caravansaries.

Within the gate, the route leads to the oblong square adjacent to the palace, this being also surrounded by walls, and having gateways at either end. In front is the "Gate of the Lion," a fine archway highly colored in modern Moorish style, and at this

gate daily waits a Governor of Fez to dispense justice. He sits cross-legged in a deep niche in the gateway, attended by his secretaries, and having squatting in a semicircle in front, his numerous detachment of red-turbaned and white-robed soldiers. Before him kneel the plaintiff and defendant in the suit being heard, of whom it is well said by an observer that they are "both talking volubly at the same time, and each calling upon Allah to witness that the other is a liar — which is probably true." Beyond this gateway is another square, with the entrances opening upon it of the private precincts of the palace, and here is usually found another guard of soldiers, often fast asleep. From this second square the routes leading to old and new Fez divide, the latter on the upper hill-slope containing the palace and official district and the Jews' quarter, or the Mellah, but not displaying much of interest. The old town is the most attractive. A wide roadway from this second square, bounded by the high walls encircling the Sultan's garden, leads into Bu Jelud, a large open space, and at once we are amid the promiscuous crowds of the city. Here the snake-charmers and story-tellers congregate, and the devotees of various Moslem sects go through their religious ecstasies for "baksheesh." The hill-slope is steep below Bu Jelud, and there is the greater part of the old town, upon the slopes, winding along the course of the Wad Fas, coming from the higher

plateau down through the palace enclosures, and then going off into old Fez farther below. When the gateway out of Bu Jelud is passed, the genuine old Fez is entered, with all its original oriental attractions, its peeps into the sunny courts of mosques, its crowded bazaars and narrow streets.

The Talaa, the long main street of the city, goes through its heart, from Bu Jelud down to the great Kairuin Mosque, at the bottom of the hill. Here is always a varied crowd: "shereefs," the rich and aristocratic descendants of the Prophet; officials mounted on saddle mules and attended by black slaves, pushing their way through the people, and crying *balak,* which is polite Arabic for "get out of the way"; coal black negroes bought from African tribes; fair Fezzis, having pink eyelids fringed with yellow lashes: a veritable medley of humanity, displaying every shade of flesh and color, and every hue of raiment. Then the buildings are curious, for ruin and decay have everywhere placed their stamp, and even the modern structures seem to display the general tendency to crumble. There are two structures in the Talaa exhibiting great beauties, both being mosques and sanctuaries, and therefore forbidden ground to the Christians. The mosque and college of Bu Ainan, to the outside view shows an exterior more decorated than usual, and having a beautiful display of old plaster work and mosaic tiling. The wood-carving of the projecting beams and their supporting

brackets is excellent in design and workmanship. The doorway of the mosque gives a passing glimpse of the open interior court, its marble floor and capacious central fountain, with the border of deep shaded arcades, presenting a handsomely decorated façade. The other mosque, lower down the hill, is the little sanctuary of the Shrebelein, its square tower exquisitely decorated in mosaics of tiles with geometrical patterns elaborately displayed between the projecting edges of bricks. This beautiful little mosque stands partially out in the Talaa, giving a better view of the tower, the green tiled roof, exterior arches and buttresses, making a perfect specimen of medieval Moorish art.

Upon the Attarin, a view can be hurriedly got, through the door of the sanctuary of Muley Edris, but it has to be quickly seen, for a Christian stopping to look in would soon be hustled by the crowds of believers, horrified at such an infidel profanation of the holy place. The transitory peep discloses a picture of dazzling color, mosaics of tiles of every hue, gorgeously painted and carved woods, delicate plaster work, a marble and tile floor and plashing fountain. This is only a little court, the building not being of large size, but the most skilled and famous Moorish workmen have been employed in its decoration, making a perfect art gem of the tomb and of this outer court. Within, everything is similarly gorgeous, the wonderfully carved and painted roof pro-

tecting the rich draperies of the walls and the splendid velvet covering of the saint's sarcophagus. From the dome hang in profusion, lanterns, lamps and glass chandeliers, which when illuminated must give splendid effect. This is the tomb of Muley Edris II, which with that of his father in the mountains of Zarahun, are the most renowned tombs of saints in all Morocco. These tombs of the saints have a great hold on the population, being the objects of frequent pilgrimages, and each saint having his special feast day, when vast crowds come, sacrificing sheep to his memory, and making merry. Near the door of this mosque of Muley Edris is the chief caravansary of Fez, called the *Fondak en Najjarin.* A grand arched gateway leads into the courtyard, its panels of rich tiling and wonderful overhanging roof of tier upon tier of carved wood, being regarded as perhaps the finest in the empire. Tall grayish-yellow walls rise above and all around this architectural gem. Upon the right hand side is a drinking fountain. In the interior of the caravansary, three tiers of galleries surround the courtyard, the balustrades being of the finest workmanship in cedar, which has turned dark with age. White columns divide the panels of these balconies, supporting the tier above and having capitals of finely moulded plaster. The upper tier is almost entirely enclosed by small horseshoe arches in cedar wood, delicately carved. The shops and offices of the best class of

Fez merchants surround the courtyard, where their business is carried on, and caravans of camels coming from afar, enter the grand gateway to kneel and discharge their loads of merchandise. Nearby in a bazaar the cedar-wood carpenters ply their trade, making the whole region sweet with the scent of the wood.

A little farther down the hill is El Kairuin, said to be the largest mosque in Africa and the great University of Fez. The mosque, excepting for size, is not specially attractive, but this was the famous University, renowned in the middle ages throughout Europe, and to which not a few Christians were then sent for an education. Its great library, however, has almost disappeared, though the University still educates nearly all the scholars of note in Morocco, who pass through its colleges of medicine, divinity and the law. Thus Kairuin issues the diplomas to the law students which are a requisite to practice. Beyond, and lower down the slope, are the braziers' quarters, and the street of the dyers, their silken skeins of every hue hanging in the sunshine, while the workmen who are almost as gaudy as the silks themselves, stir the spacious vats of seething liquids, chiefly blue and red. This makes a naturally charming street, and here are produced the brilliant Fez caps which are prominent in all oriental lands. Then the highway goes steeply down to a bridge crossing the river, where the torrent rushes between

rocky walls, surmounted by tall houses, and turns many a little mill-wheel in its vigorous descent. On the other side the highway again mounts the hill among more shops, and a district of dwellings. Here at an elevation, on the southern river bank, is the Andalus mosque, its magnificent gateway towering high above the flat roofs of the neighboring houses. This gateway stands boldly at the upper end of a street, and resembles the gateway of the great Caravansary, though more airy and delicate in decoration and construction. Higher up the hill are the furnaces where the noted Fez decorative tiles are made. This tile-making survives as effectively as in the greatest days of Moorish power and constructive skill. The tiles are baked in monochrome squares from which the mosaics are chipped out by hand with a small sharp hammer. The process makes a number of small tiles of various sizes and shapes, cut with the most exact edges, which when fitted together form the exquisite designs of the dados, floors and fountains of the Moorish houses. So exact are surface, edge and color, that when arranged in position it is almost impossible to feel or see the division between the tiny mosaics, so skilfully is the work done.

Everywhere in Fez is the sound of plashing fountains and running waters, the special solace of the Moors. There is an entire district of the most delicious gardens growing lemons and oranges, apricots and pomegranates, and having in all directions

A Garden in Morocco.

diminutive streams passing over fern-covered rocks, bubbling in the fountain basins, and making the air savory with the moisture and perfume. This is on the higher surface, away from the narrow crowded streets of the lower town, and here the rich Fez merchants have their arbor-shaded and vine-embowered rural homes. Going out the gates and up on the hills overlooking the city, the visitor gets a lovely view of the winding valley that encloses the long and narrow place, with its glistening white roofs and border of groves and gardens, looking like a broad streak of white embedded in a border of the most vivid green. High on the summit of the ridge, north of the Bab el Gizet gate, where are the ruins of the tombs of the ancient Beni Merin dynasty who ruled Fez and Morocco, is got a grand view over the deeply indented valley of the town, as it slopes toward the wider intervale of the Seboo to the eastward, which can be traced far away over the western plateau as it carries the waters of the Atlas mountains out to the distant Atlantic.

CEUTA AND TETUAN.

The beautiful bay of Tangier is bordered on its eastern side by the protruding headland of Cape Malabata. Beyond, the coast of the Gibraltar Strait trends northeastward in front of the Sierra Bullones, rising into the African Pillar of Hercules, the Elephas of Strabo, the Jebel Musa of the Moors, and

the Apes Hill of the English. This noble peak towers above all the adjacent heights, its truncated top being often hid in clouds. Farther northeastward a low and narrow isthmus terminates in Mount Acho, about four miles off, its extremity being the end of the Gibraltar Strait. This peninsula jutting out north-northeast, is almost exactly opposite the Rock of Gibraltar, and upon the isthmus is the town and fortress of Ceuta, a Spanish possession, but a very ancient settlement, being the Roman Septa, and the Moorish Sebta. Upon Mount Acho is its citadel, capable of sheltering a garrison of five thousand men. This stronghold has a Spanish military governor, and is the chief of what are known as the Presidios, the five Spanish convict establishments on this part of the African coast, the governor of Ceuta controlling them all. These settlements have a population of some twelve thousand convicts, and are variously located, their reservations covering over thirty-two hundred square miles. The town is well built, and has a cathedral and several convents, but the trade is restricted, the harbor being unsafe. It was from Ceuta that the Moors under Tarik first crossed over the Strait to invade Spain, and in 1415, John I of Portugal captured Ceuta from the Moors, the place subsequently passing under Spanish control.

The Moroccan coast trends southward from Ceuta to Cape Negro, while beyond is Cape Mozari, the

immediate shore between these headlands being low-lying, and giving the appearance of a bay, though the indentation is only slight. Just visible from the sea, on the hill slope, with an environment of cliffs and high hills inland, is Tetuan, its so-called Bay of Tetuan in front, and having at the little Martil river entrance its port and harbor of Marteen. The situation is picturesque. The bold Riff mountains, beginning behind the town, stretch southward along the coast for nearly two hundred miles, and Tetuan is built upon the slopes of an outlying spur of this range. It is about forty-four miles southeast, overland, from Tangier, and the usual route to it for visitors is by a horseback or muleback journey from that city. This monotonous ride takes all day and sometimes more, if the Moorish military guard accompanying the party (being paid by the day) persists in slow walking. When some fifteen miles off, the procession mounts the last hill which borders the broad Tetuan plain, and thus is got far away, the first view of this beautiful city, its walls, towering minarets and dazzlingly white houses being seen ahead, high on the ridge, and overhung by the environment of precipitous mountains. Upon the summit of the hill on which the city rests is the castle where the governor resides, and to the southward the surface rises into a ridge elevated three thousand feet above the sea. Upon nearer approach, the place is found to be surrounded by walls, flanked with

towers and defended by the castle. This is the Moorish Tettawin, said to have been founded in 1492 by refugees expelled from Granada by the Spaniards. The high society of Tetuan are the descendants of these refugees, proud of their pedigree, and some of them still hoping to ultimately return to their original family abode, so much so that they yet preserve as heirlooms the title deeds and keys of the old Granadan homes on the Jenil. Tetuan was briefly in English possession, when it was part of the dowry of Catherine of Braganza, the Portuguese queen of Charles II, but it was subsequently given back to the Moors who held it continuously until taken by storm by Marshal O'Donnell, in 1860, for which achievement Spain made him Duke of Tetuan, but they too gave it back to Morocco when peace came in the following year. There are about twenty-five thousand people in Tetuan, including a considerable number of Spaniards. There are forty mosques, several being fine structures, but the streets are narrow and dirty. The harbor is poor, being an open roadstead, unprotected toward the east, whence comes the full rush of the Mediterranean waves, it being on the western verge of the great sea. Only small vessels can enter, and thus traffic by water is restricted, being chiefly supplying provisions to Gibraltar. It has, however, a lucrative caravan trade with Tangier, and inland to Fez and beyond. There are also manufactures of leather and firearms, with swords and

daggers. The Tetuan market-place displays the customary oriental features — groups of squatting camels attended by villainous looking Riffs in dirty embroidered robes; donkeys loaded with vegetables, throngs of dignified Moors, stalwart negroes, half-naked children, with the inevitable snake-charmer, story-teller and juggler, the money-changer and fruit huckster, but the men far outnumber the women in the crowds. There are quaint booths and covered ways in the Tetuan bazaar, where curios may be found that were not made in civilized lands, and profuse supplies are offered of the interesting Morocco goods of the natives. Tetuan is an admirable winter resort, the mild climate being attractive, and its picturesque environment and pure oriental flavor are specially appealing to artists.

THE RIFFS.

Morocco has neither railways nor telegraphs, and its roads are very poor, being mainly caravan tracks on the chiefly travelled interior routes, and wayward mule paths that have been used for centuries and never improved. Thus the methods of transportation are thoroughly primitive, and are not much better now than when the Arabs came along as conquerors under the great Sidi Okba, in the days immediately succeeding the death of Mohammed. Nor were the habits of the nomadic tribes much changed during the centuries of Moorish rule, for Morocco

gives the great powers of the world constant trouble on account of lawlessness and brigandage. Beyond Tetuan, at first southward, and then curving around to the eastward the coast of Morocco, toward the Mediterranean, presents all the way to the Algerian boundary the rugged profile of the Riff mountains, still largely unexplored, which generally terminate in lines of cliffs, broken at intervals by narrow sweeps of sandy beach, but occasionally by open vistas of beautiful and fertile valleys, with evidence of tillage and good cultivation. Upon this coast, after it curves to the eastward, is the Spanish fortress crowning the rocky island of Penon de Velez, one of the penal settlements, while inland, in the valley off which it mounts guard, was the Arab town of Badis, or Velez de Gomera, as it was called down to the sixteenth century. Farther eastward is another Spanish presidio, occupying Al Mazemma, the larger of the group of Alhucemas islands, in the fine semicircular bay of that name, which is at the seaward end of one of the most beautiful valleys in the Riff, clothed by verdure and dotted with hamlets. These islands were the Ad Sex Insulas of the Romans. Beyond, projects the bold and rocky peninsula which has on its eastern side the fortified town and presidio of Melilla, held by the Spaniards since 1653, having on the heights behind, its chief defensive work, Fort Rosario. Still farther eastward are lakes and salt marshes, the low

and sandy shore stretching a long distance to Cape dal Agua. Out in front is yet another group of islands, dry and barren, which were the Roman Ad Tres Insulas, and are now known as the Zafarines, their name being derived from the Beni Jafar, an Arab tribe occupying the adjacent mainland from the time of the conquest. These islands belong to Spain, also being used for a presidio, and their protective barriers form the best roadstead upon the Riff coast. About two miles eastward the great river Muluya flows out to the sea, and a short distance beyond is the Algerian boundary.

The nomadic dwellers along these Riff hills are among the worst tribes of Morocco for lawlessness and savagery on land, and piracy and wreckage on the sea. In fact these Anjeras are said to commit every atrocity of aboriginal Africans, excepting cannibalism. Their mountain fastnesses are practically unexplored, and although Melilla is right in front of them, its Spanish possessors have never been able to control these tribes, and are forced to maintain as strict guard against them as when first conquering the port in the seventeenth century. The Spanish possessions extend but a short distance inland, and there the frontier is marked by a line of whitewashed stones, and a popular pastime of the Riff has been to hide near this boundary and shoot at any Spaniard that may cross it. Occasionally Spain has sent an expedition into the mountains to punish the lawless,

but they are not to be conquered. Neither do the Riff tribes pay tribute to the Sultan of Morocco, and if he attempted to send his toll-gatherers into the mountains they would be massacred. The main Riff industry, so far as the outside world knows it, is the practice of brigandage, and the wreckage of luckless vessels that come on the coast, the currents out of the strait being so strong that they are easily cast upon sunken reefs. The captured crews are often slaughtered without chance of ransom. Once in a while these crimes are disclosed, and then a gunboat may be sent to shell the lairs of the mountain pirates and force surrender of booty, and if possible of prisoners. Quick action of this kind has saved some crews, who have been put on bare rocks far from the shore to be taken off by the rescuers. There are beautiful valleys and pretty coves coming out on these shores indented between superb headlands, where the wreckers draw up their canoes. These boats are painted green, the better to enable the pirates to sail unseen over the bright green waters.

The Marquis de Segouzac, who some time ago ventured among these people, and has told us much that we now know of them, had to go there disguised as a nomad. His hair was shaven, all but a small tuft, which the Riff wears on the top of his head, the easier to be pulled into Paradise. A short tunic fastened at the waist by a belt, was worn, his legs being bare and his feet sandalled. His turban was

made of leather thongs, the sandals woven of alfalfa grass, and the tunic striped brown and black. The Marquis spent about six weeks in these mountains, and then made his way out, going to Fez, where the French consul received him as a real Riff. He told of the food of the tribes, which is mostly honey used in many ways; and of their utensils that are in similar forms with those found in Egyptian and old Afro-Roman cities. Their dwelling places are built upon most inaccessible spurs of the mountains, constructed of rock, and much like caves and tunnels. These coverts are ancient, having been used for many generations. The men are big, and owing to their repeated forays and captures, each soldier is liberally supplied with rifles, swords, daggers and pistols. As man-hunting is a popular occupation, the Marquis says the Riff women disdain a warrior who has not slain a foe or captive, these ladies taking active part with their husbands in all the fights, serving as skirmishers, defending the forlorn hope, and helping the wounded, while if a Riff shows any backwardness in combat they ridicule and sometimes even maltreat him. Their last and final expression of contempt and derision is shown by tying wisps of straw to the tail of the coward's horse. The ambition of each Riff warrior is said to be the possession of three wives, their proverb being: "Two wives in one house is hell; three are paradise." But they mistrust each other, so universal is the desire for com-

bat and pillage. The lone traveller is usually waylaid and robbed, even the women joining in this, so they generally will not travel excepting in caravans, and these take them and the multitude of beggars to new fields for foray and plunder. Such is one of the Moroccan races, existing now as for over a thousand years, and which the world as yet is unable to civilize.

In the summer of 1909 the Riff tribes attacked the Spaniards at Melilla with such vigor that for a while it looked as if the fortress might fall. The efforts of the Spanish government to recruit troops for its reinforcement were the cause of the riotous outbreaks at Barcelona which for a time were so portentous. There are valuable iron and lead mines among the Riff hills, and when El Roghi was in power there, he sold concessions to work these mines and thus amassed his large fortune, but his downfall clouded the Spanish titles and made disputes, that on July 9 caused an outbreak in which four Spanish workmen were killed. The commandant at Melilla sent out troops to punish the murderers, and this was the signal for assembling all the wild tribes of the region who attacked the fortress July 18, when its garrison was about 8,000 men. By occupying the caves and slopes of Gurogu mountain, which rises to an elevation of 3,000 feet, a short distance southeast of the town, the Moors got into such strong position they could not be dislodged. For two weeks fighting continued

with heavy loss on both sides, when reinforcements hurried from Spain became available. The entire Spanish navy — one battleship and nine cruisers — came to the harbor and coast, the warships shelling the villages and haunts of the Riff tribes, causing much havoc, while the military force was enlarged to 38,000 men. Late in August this army managed to turn the Riffian position on Mount Gurogu and thus got the upper hand. This was not accomplished, however, without severe fighting. Later, through the adoption of a more conciliatory policy hostilities were suspended, and while a strong garrison still occupies Melilla and its outposts, and the spirit of unrest continues, active hostilities ceased. The disturbed conditions all about Morocco keep European diplomatists constantly on the alert to prevent a general embroilment that might involve the great powers.

ALGERIA.

The French province of Algeria adjoins Morocco on the eastward, extending about five hundred and fifty miles along the Mediterranean coast, and possibly four hundred miles inland, the southern boundary not being accurately determined, as, like Morocco, it fades indefinitely into the great Sahara. The region adjoining Morocco is the Algerian province of Oran, stretching practically from the Muluya river, about one hundred and eighty miles eastward along the coast to the mouth of the river Shelliff.

Into this province the Riff hills come some distance beyond the border, and fade gradually away, and it extends south from the sea to the Atlas mountain range, being also traversed by various ridges of the Little Atlas. A large part of the surface is forest, and the soil where cultivated is mostly fertile, and it has a considerable Spanish population, increasing by immigration. There flows out of the hills a small stream called the Wad-el-Rakhi, at the foot of the peak of St. Croix, into Oran bay, and on the river banks is Oran city, with about fifty thousand people. The town, now under French control, is well fortified, and in general substantially built. This settlement was long a subject of contention between the Moors and Spaniards, and the latter, under Cardinal Ximenes, took it in 1509, retaining it until the early eighteenth century, when the Algerians expelled them. The Spaniards regained possession in 1732, but subsequently gave up the town. It has no good anchorage immediately at the city, but the large harbor of Mars-el-Kebir is three miles distant, and defended by a castle which the Spaniards then retained. The French when they conquered Algeria, got control of Oran in 1831. The city has a castle and an arsenal, a hospital and two good churches, one built by the Spaniards in the time of Charles V, and the other formerly a mosque. There are few other attractions, and much of the surrounding country is arid and barren.

The general aspect of the Province of Algeria from the Mediterranean coast back to the Little Atlas range is a surface rising in various smaller ranges like so many ascending steps, while the Little Atlas itself does not reach much elevation comparatively. Behind it, however, the Greater Atlas system, bordering the Sahara, rises in summits, some of which reach 7,000 feet. A railway has been constructed into this region, southwestward from Oran to Tlemcen, the Roman Pomaria, about seventy miles, this being the great French fortress controlling the Moroccan frontier of Algeria. It is an ancient city in a most picturesque situation, about thirty miles south of the Mediterranean. Built on the mountain slope adjoining a valley at about two thousand feet elevation, there are large mountains rising behind it, while in front spreads the beautiful and fertile valley, its orchards and grain fields extending as far as the eye can see, until lost in the hills at the horizon. It was originally called Jidkoh, and for several centuries had a population of over one hundred thousand, when it was an independent state under Arab rulers. It fell to the Turks in the sixteenth century and they gave it to the Dey of Algiers, but in 1670 the people revolted and the city was burned. The French captured it in 1842, and have since greatly strengthened the fortifications, there being about twenty-five thousand population and a large French garrison, while the recent development of the place has been

in the construction of many modern French buildings. It is an ancient walled town, with citadel and elaborate towered gates. The citadel is now the barrack and hospital for the troops, and the minaret of its mosque, ninety feet high, overlooks the rest of the city. It was within this citadel, on a gallery paved with marble and onyx, there stood a famous tree of solid silver, on which were many rare singing birds of gold and silver, whose warblings were attuned by ingenious mechanisms. Tlemcen had seventy mosques in its day of greatest splendor and now there are over thirty. The Jami-el-Kebir built in the twelfth century covers an acre, and is the chief mosque of Tlemcen. The mosque of Sidi Bon Medin has splendid bronze doors, rare decorations in Moorish lacework and mosaic flooring, being some distance outside the walls, where it was built at the tomb of the saint, who was a noted Arab scholar in the twelfth century and a learned expounder of the Koran.

When Tlemcen was in the height of its glory it was attacked and besieged by a rival Arab chieftain, Abou Yakub, who conducted his siege for seven years before he succeeded, and he built on the valley plain his fortified camp and city about three miles away. This is Mansoura, interesting though a ruin, and which for a long period was a rival of Tlemcen. Its fortified walls enclosed about three hundred acres, and its mosque with a minaret tower rising a hundred

and thirty feet was a splendid structure. The mosque is in ruins, but the tower well preserved with its green porcelain tiling. Much of the old walls remain, but a large portion are crumbling and most of the original city enclosure is now a rich vineyard, the vines bearing large white grapes and running up the walls and spreading around the base of the tower. Abou Yakub did not live to enjoy his victory, for he was assassinated just about the time Tlemcen surrendered. Now, the ruins of Mansoura show that Tlemcen ultimately and in reality conquered, and the French who hold it and have made it a miniature Paris, as well as a fortress, are sure they will in time become the masters of all northwestern Africa. Already the unrest of the Moroccan tribes gave them the chance in the spring of 1907 to march over the boundary and occupy Ujda, which is on the eastern plain bordering the great Muluya river, an important port where they held the Pretender Bu Hamera in check.

The maritime region of Algeria, eastward of Oran, has numerous narrow valleys, each carrying down to the sea its mountain stream. In some places the hills rise abruptly from the Mediterranean shore, while in others, tracts of lowlands intervene near the coast, the surface being mostly marshy, but with portions that are fertile and well cultivated. The Bay of Algiers is about in the centre of the Algerine coast, and upon its eastern side is one of the most

extensive of the fertile plains, the Metidja, stretching inland, south and west, for about sixty miles, with a breadth of ten to twelve miles. As much of the Algerine coast is steep and rocky, abounding in capes and reefs, it is deficient in good harbors, and even in secure roadsteads, all being exposed to the strong north and northeast winds crossing the Mediterranean. The Algerine rivers are numerous but small, being usually torrents rushing down short courses, through deeply worn and rocky channels from the mountains to the sea, and greatly swollen in the winter rainy season. The most important of these rivers is the Shellif. To the northeastward of Oran is a deeply indented bay having Cape Ivi as its eastern boundary, and within the cape the town of Mostaganem. Here the Shellif flows into the Mediterranean, coming from the eastward among the mountain ranges, its course being some three hundred and seventy miles. Much of the marshy surfaces, especially near the larger towns, have been drained since the French occupation, making the climate more healthy, and the fertile land which is well cultivated, is almost all near the sea. Farther inland, the country is largely a pasture land, though growing fruits. There is still a Dey in Algiers, who nominally governs the Turkish and Arab tribes, while the French hold the civil government. To conquer and keep this peculiar country and its nomadic peoples have cost the French dearly, and down

to 1864, according to a Ministerial statement made in the French Assembly at Paris, Algeria had required an expenditure of $600,000,000 French money and 150,000 lives, while a French army of 60,000 men is maintained in the Province.

This noted region has been fought for during many centuries. It was long held by Carthage, after the original Phœnician settlement, and the Romans got possession when they defeated Hannibal, placing it under a native ruler who was entitled King of Numidia. Julius Cæsar made it a Roman province, and in the fifth century the Vandals drove the Romans out, they in turn being expelled in 533 by the Emperor Justinian's general Belisarius. The Saracens in their wonderful western conquests after the death of Mohammed made themselves the masters in the middle of the seventh century, but afterward the region divided into a number of tribal states under various petty chiefs, and relapsed into barbarism. Then followed the powerful Moorish Almoravides dynasty in the eleventh century, who for several successive generations ruled all Barbary, and most of Spain, being succeeded by other Moorish chiefs, and then it was again cut up into petty states. Ferdinand of Spain captured Algiers in 1505, holding it until his death, when the Moors, as heretofore told, invited the pirate Arudj Barbarossa to come and aid them, establishing the system of piracy which continued until the French occupation in 1830.

After the Spaniards had captured and beheaded Arudj, his brother Khair-ed-Din became the Pasha, and ultimately by Turkish aid drove out the Spaniards. He strongly fortified Algiers and built a mole to protect the harbor, employing thirty thousand Christian captives for three years in this work. Then the Algerian pirates with their fortified stronghold became the dreaded scourge of all nations. Then Pope Paul III persuaded Charles V to undertake an expedition against them, issuing a bull, offering full remission of sins and a crown of martyrdom to all who either fell in battle or were captured and made slaves. Charles sailed against Algiers with twenty galleys, one hundred and twenty ships, and thirty thousand chosen men. They landed on the coast, and were proceeding to invest and attack the city, when a terrible storm came, and on the night of October 28, 1541, destroyed fifteen galleys and eighty-six ships with their crews and stores, so that the army on shore was deprived of subsistence. It was soon fallen upon by the Algerines, killing many and taking a large number of prisoners, Charles himself and the remnant of his defeated forces escaping with difficulty.

The Turkish power ruled Algiers until the seventeenth century, being reinforced by many of the Moors expelled from Spain, who flocked hither in large numbers, and being expert sailors they greatly strengthened the Algerine fleet. Their piracies be-

came so audacious that in the seventeenth century all the European nations, one after another, attacked them — the French, English, Venetians and others — destroying part of their fleets. In 1682, Louis XIV sent a French army which bombarded and burnt Algiers, but it was not until the English held Gibraltar that they were again got under partial control. In the eighteenth century the policy of paying tribute checked the piracies, but the cruelties practised upon Christian slaves and the faithlessness of the pirates provoked the United States to the attack and capture of Algiers in 1815. This was done by the fleet of Commodore Decatur, who sailed into the harbor in June, and sent the message to the Dey, demanding the release of all Americans held in captivity. The Dey replied that he would liberate the captives in exchange for a tribute which included gunpowder. To this the Commodore promptly answered that "If the Dey wants powder he must take the balls with it." The bombardment began and quickly the prisoners were released without tribute. This was followed by the British expedition of 1816, which destroyed the Algerine fleet and liberated all the slaves, when the pledge was made that piracy and slavery should cease forever. The treaty was broken as usual, however, and again the Algerines defied the world. Ultimately a dispute arose about a debt, and in the discussion the Dey of Algiers publicly struck the French Consul in the

face, an insult which prompted the French expedition of 1830. It landed on the coast, defeated the Algerine army, bombarded and captured Algiers, which surrendered on July 4th. The Turkish troops then left the country and the Dey and his retinue went to Naples. Subsequently, with the English acquiescence, Algeria was made a colony of France, but the native tribes did not submit, and a long, desultory and most destructive war ensued. It was about this time that the famous Abd-el-Kader, who was born in 1807, appeared upon the scene. Placing himself at the head of the Arab tribes, he conducted his campaign with such skill that he was recognized by the French in 1834 in a treaty made with him as the Emir of Massara Province. More conflicts followed, and another treaty in 1837, but again the war was renewed, the French placing one hundred thousand men in the field. Twice, when pursued, Abd-el-Kader crossed the border into Morocco, and got that country embroiled with France. The war continued until 1848, when, beaten on all sides, Abd-el-Kader surrendered to the French and was imprisoned in France at first at Pau, and afterward at Amboise. In 1852 he was liberated and went to Asia Minor and ultimately to Arabia, dying at Mecca in 1873. After his capture there were frequent disturbances, until the French civil government was established in 1871, with a large standing army, but while it has been a costly process, France has since managed to rule

Algiers with only occasional rebellions. The population of this leading colony of France is about 5,000,000.

THE AFRICAN PARIS.

When the French got full possession of Algiers they created out of the old piratical town a sumptuous resort upon the edge of the Mediterranean, which came into fame among travellers as the "African Paris." Between the bold projecting Capes Caxine and Malifan is indented the beautiful harbor, encircled by an amphitheatre of high hills in a most delightful situation. The first view, on the approach from the sea, is most picturesque. In the front of the city is the superb new Boulevard de la Republique, extending along the shore and bordered by stately buildings of Parisian style. Towering over this newer town, the older Algiers of narrow and steep streets rises tier above tier upon the hill slopes, to the crowning citadel, the Kasbah. The white stone arcaded walls supporting the Boulevard, having above the cluster of white houses, stand out in strong relief against the background of dark green wooded hills, and as the Arabic description tells us, they glisten in the sun like "diamonds set in emeralds." Thus this beautiful city has a special charm in the first view, for those who seek it as a winter resort. It is the *Al Jezireh* of the Arabs, meaning "the island" because originally there was

an island in front of the town, which was joined to it by a mole. The city is built in the form of an amphitheatre, on the western shore of Algiers bay, mainly occupying the northern slope of an abruptly rising hill, which it ascends somewhat in the form of an irregular triangle, the apex being the Kasbah, the ancient fortress of the Deys, elevated about five hundred feet above the water. Everything is built of white stone, and seen from a distance, its strikingly beautiful appearance has been compared to an old time ship under full sail. The ancient walls have been demolished, and the present defence, which is very strong toward the sea, also has been recently strengthened on the landward side by a line of forts occupying the edge of Mount Busmea at over thirteen hundred feet elevation. The enclosed port has been much improved and the harbor protective jetties extended, the guiding lighthouse having a revolving light visible fifteen miles at sea. The regular service of steamers to France is across the Mediterranean northward to Marseilles, about five hundred miles away.

The newer French town, on the lower slopes along the shore, has impressive streets and squares and quite a Parisian aspect, with the Place du Government in the centre, a large and handsome square, planted with orange and lime trees and having a central fountain. Here is the Government House. All the modern streets are spacious, and the buildings

are adorned with arcades, a protection against both the hot suns and rains. The old town, occupying the higher slopes, is entirely oriental, with the usual narrow, winding and dirty streets and Moorish houses, square and substantial looking buildings, presenting to the street the bare walls, and having only a few narrow slits, protected by iron gratings, in place of windows. Each house has an interior quadrangular open court, entered by a low and narrow doorway. Upon this court all the rooms open. The Moor is in constant evidence, but there is a cosmopolitan mixture of peoples, including many French Chasseurs and Zouaves. In these ancient streets, usually only from five to a dozen feet wide, the Moors abound, and in the deep fissures which these passageways make between the high and sombre house walls, the odors are not always the latest French perfumes. There are not many attractive buildings. Visitors may occasionally venture barefooted into the Grand Mosque, the *Djama Kebir,* a plain building fronted by a row of white marble columns, where the beautiful courtyard is surrounded by arcaded galleries supported on elaborately carved marble columns. Its central fountain is generally the focus of a crowd of the faithful, performing their ablutions preliminary to worship. Near by is the Jardin Marengo, the most attractive public square of the city, having a fine outlook over the sea and adjacent shores and hills, and adorned

by a column in memory of Napoleon which is inscribed with his victories. Just above this pleasant square in a picturesque location is another mosque, consecrated to the Moslem Saint Sidi Abd-er-Rahman, and having his tomb which is a great place of pilgrimage. It is also the sepulchre of several of the Deys. This mosque is splendidly decorated and displays the most exquisite horseshoe arches constructed of the purest white marble. Another ancient mosque is now the Cathedral of Algiers, its oriental character being well preserved. In it is the sarcophagus containing the famous block of concrete which inclosed the remains of the Arab martyr Geronimo. He was put to death in 1569 as a Christian renegade, by being buried alive in this block of concrete, which was then used in building a fort, the block being discovered several centuries later. There is a plaster cast of the body in the Algiers Museum. This structure, formerly a palace of Mustapha Pasha, is regarded as the best specimen of Moorish architecture in the city. The palaces of the Governor-General and the Archbishop are also impressive buildings.

The surmounting Kasbah, the ancient palace of the Deys, and citadel of the city, crowning the older town, is the chief attraction of Algiers, being now used for the military headquarters and barracks. It is well preserved and has a large central court, paved with white marble and surrounded by arched

galleries. The ancient throne-room of the Deys is on one side, and here is preserved the chain on which, in the piratical times, were exposed the heads of decapitated Christian slaves. Alongside is also the historic pavilion, wherein was given the blow to the French Consul in 1827 by Hussein, the last Dey, which precipitated the French invasion and lost him the throne. The name of the Kasbah is also generally given to the Arab quarter, the older town, the line dividing it from the newer French city being the Rue de la Lyre. "Cross this street," writes a visitor, "and you step back a thousand years; in no Eastern town is the transition so abrupt, and at few Eastern cities can one see oriental life in such perfection." The narrow streets are largely of stairs on the hill slopes, going up to the cathedral, or down to the newer town. Here the "Arabian Nights" are reproduced, and in the bazaars the ancient diplomatic method of purchase goes on now much as then. Solemn bargaining is an indispensable preliminary to purchasing, and it is well said that in the necessary amount of talk and chaffering, "the buying of a brass tray or embroidered saddle-cloth is a solemn treaty, and the bargain for a lamp a diplomatic event not to be lightly undertaken or hurriedly concluded." The Algiers' amusements, which culminate at the carnival, are given a novel tinge by these Arabs and their negro auxiliaries, who enter into the festivity with

their tom-toms in full blast, and the quaintest music, the sheiks appearing in their gorgeous robes. The Spahis, or native Arab cavalry, who are an adjunct to the French military establishment, and are mounted on superb steeds, also go through specially interesting manœuvres. Among the recent events that gave a great day to Algiers was the visit of King Edward VII and Queen Alexandra in April, 1905, calls being exchanged with the Governor, and the people enjoying a royal holiday.

Unlike Morocco, which has no railways, Algiers has quite an extensive system developed under the French management, which has opened up various attractions of the interior of the country. Among the famous monuments near the city, and a most conspicuous landmark, is the colossal mausoleum of the ancient Mauritanian sovereigns Juba II and his queen, who was Cleopatra's daughter. It is a huge truncated cone, about one hundred feet high and having a circumference at the base of six hundred feet. The entrance to this mausoleum was recently discovered, but it was found that the tomb had long ago been rifled. All along the coasts and in the interior there are Roman remains, showing an extensive population in their time, with ruins of baths, temples and amphitheatres, and these relics extend throughout Algeria and Tunis. Southward from Algiers is Blidah, famous for its orange groves, and beyond is the splendid Gorge of the Chiffa,

stretching for ten miles through the Atlas range with most romantic scenery, the enclosing mountains rising about 5,000 feet. Southward, and sixty miles from Algiers, is the picturesque mountain town and military post of Medceh, one of the French outposts defending the approach to the Pass at an elevation of 3,000 feet.

CONSTANTINE PROVINCE.

The chief railway system of Algeria is constructed eastward from Algiers to Tunis, with various branches. This system goes through the Province of Constantine, corresponding very nearly to the ancient kingdom of Numidia, which in early times was occupied by nomadic tribes from whom the name was derived through Greek sources. It is also the haunt of wild animals, frequently brought to Rome to adorn the triumphs of conquerors and for the combats in the Colosseum. The Numidians were famous horsemen and before the Roman conquest, when tributary to Carthage, they gave Hannibal his powerful cavalry squadrons. Afterward they entered into coalitions with the Romans and aided them in overcoming Carthage. Its downfall was due to the final defeat of Hannibal by Scipio, at Zama in Numidia, where the terror caused by an unexpected eclipse of the sun made a panic among his mercenary allies. The Province of Constantine is now the whole eastern portion of

Algeria, extending to Tunisia, and stretching inland from the Mediterranean southward a long distance to the Sahara, where the indefinite limits gradually shade off into the desert, in regions occupied by practically independent native tribes. In fact a very large part of the population of the whole province is composed of bands of these nomadic people. The Atlas ranges traverse it toward the eastward, the mountain spurs sloping to and being broken off in rocky precipices along the Mediterranean coast. The splendid mountain region known as the Algerian Switzerland lies eastward from Algiers, and is penetrated by a railway through the district of Kabylia, where the mountain spurs stretch out to the coast for many miles, in protruding capes, with the spacious Gulf of Bougie on their eastern verge. On the summit of the chief mountain overlooking this superb bay is a great French fort at over three thousand feet elevation amid grand scenery, which has become a popular centre for tourist travel. Upon the shore of the bay about a hundred miles east of Algiers, is the capital of Kabylia, the town of Bougie, which was the ancient Saldæ, its roadstead being the safest on the Algerine coast. Up on the mountain where the fort crowns the summit was a place of pious Arab pilgrimage for many centuries, which got for Bougie the title of the "Little Mecca." This was the capital in the fifth century, of Genseric, the king of the Vandals, and it came under

Arab control three hundred years later. After the Spanish conquest in the early sixteenth century it declined, but in recent years the French have been improving it.

Farther eastward is the fortified town and seaport of Philippeville, about two hundred and thirty miles from Algiers, which the French established in 1838, naming it after their king Louis Philippe. The old harbor of Bona, about forty miles farther along the coast, was dangerous and unsatisfactory. This was the very ancient Arab town of Ras Skiada, known to the Romans as Rusicada, and the new settlement was built on its site and partly with its materials. It is in a beautiful situation in the deeply indented Gulf of Stora, and its population is mostly European, though there is a mosque, and many Arabs are settled here. The port enjoys a considerable trade from Europe, passing through it on the caravan routes to the city of Constantine and the eastern Sahara. There is a fertile surrounding district and abundant forests with many cork trees.

To the eastward the river Seibous, coming down from the mountains, flows into the sea, behind the protruding Cape Garde, and here in a shallow harbor, was the ancient Hippo Regius, one of the residences of the Numidian kings, which the Vandals captured and destroyed in the early fifth century. This city was famous as the episcopal see of St. Au-

gustine, who was born near Carthage in November, 354. He ministered at Hippo Regius for thirty-five years until his death in 430, at the time when Genseric and his Vandal fleet and army began the siege. When subsequently the Arabic invaders arrived in the seventh century, they named the place *Beled-el-Anib,* or "the town of grapes," its vineyards being very productive. From this title came the name of Bona, which was built along the western verge of the harbor and about a mile northward from the scanty remains of ancient Hippo. The relics of St. Augustine are preserved in the Cathedral at Pavia, and in the nineteenth century the bone of his right arm was brought over with solemn ceremony and deposited in the church at Bona. This fortified settlement has a splendid environment of hills, and nestles at their bases, having been modernized and embellished since the French occupation, although much of the former trade has been diverted to the more modern harbor at Philippeville. The old walls are flanked by four square towers and pierced by four gates, one on each side, while high on the hill is the defensive citadel built by the Spaniards under Charles V, when they got possession in 1535. Bona was captured from the Moors in 1832, by one of the most brilliant movements of the French Algerine invasion, and for more than a half century it has been a French prison for deported malefactors.

There are extensive coral fisheries, and some manufactures, including silk and tapestry. A spacious marsh adjoining the town on the Seibous is supposed to have been the harbor of ancient Hippo Regius.

The French, for strategical purposes, have constructed a railroad from Philippeville southward through Constantine Province, traversing all the mountain ranges, and going out over the Sahara desert, which is designed to extend several hundred miles southward from the city of Constantine. The river Rumel, coming through the defiles of the Atlas ranges, flows northward to the Mediterranean, and about two hundred miles east-southeast from Algiers, is crossed by the main line of the East Algerian railway from Algiers to Tunis, and at the same place by the other strategical road, southward from Philippeville to the Sahara. At this river ford and crossing, the ancients built the town of Cirta, in a strongly defensive position, upon an eminence closed in on three sides by the Rumel, this encircling by the river giving the place its name. Upon the fourth side the position is connected by a low ridge with the adjacent mountains. Originally this settlement was a dependency of Carthage, captured by the Romans, and almost destroyed by the Vandals in the early fifth century. The Emperor Constantine the Great was attracted by its romantic and strategic situation, rebuilt the town and named it Constantine. The Arabs conquered it in their in-

vasion of Northern Africa, and strengthened the defences by building substantial walls constructed of sculptured marbles taken from the extensive Roman ruins, and they also built a citadel as the crowning work of the defences. A venerable Arabian bridge, built of these sculptured stones, crosses a deep ravine alongside the town. During the Moslem domination, Constantine belonged to Tunis for several centuries, but the Algerines captured it in 1520, holding possession until the place came under the nominal French control in 1830, when they occupied Algeria, though in fact it successfully held out against them until 1837, when it was captured after a long and destructive siege. Within the citadel there is enclosed an ancient church in the Byzantine style of architecture, and the town and its neighborhood are filled with Roman relics. Although Constantine is the chief city of the Province, yet it is not very attractive, the streets being narrow and dirty and the buildings inferior, but since the French occupation it has been improved. There is a good deal of trade with the Algerine ports and Tunis, and also by railway and caravans with the southern desert. This region is subject to earthquake shocks, a good deal of damage being done at Constantine by a violent earthquake August 4, 1908.

The railway southward from Constantine to the Sahara passes through a region filled with Roman remains. At Batna it crosses the entrance to a

valley, going off westward among the mountains, and having within it the ruins of the famous cities of the Roman era, Lambessa and Timgad. Lambessa or Lambæsa, which the French call Lambese, is about five miles up the valley and fifty-five miles southwest from Constantine, and is now used as a penal colony of which the chief modern building is the extensive prison. This was an important Numidian city and an extensive Roman camp. The ruined walls and gates are several miles in circumference. Forty gates have been located and fifteen are still in good preservation. There are remains of an amphitheatre, Temple of Esculapius, a triumphal arch erected by Septimus Severus, two forums, and baths from which have been taken some beautiful mosaics. The Vandals, as elsewhere, destroyed it in the fifth century, and the site was completely lost, until rediscovered by the French in 1844. There is a large military station here. About twenty miles farther westward along the valley are the ruins of the extensive city of Timgad, which are being excavated under French Government auspices, the great mounds covering the buildings being removed, and many columns brought into light by carting away the debris. The Emperor Trajan built Thoumgadi, and it was a citadel and large commercial mart at the intersection of various Roman roads, until the Arabs destroyed it. About one-third of the ancient city has been disclosed, un-

covering the residential section, with streets twenty feet wide, crossing at right angles, paved with huge blocks of limestone measuring three by four feet, and in which the chariot wheels have worn deep ruts. Sewers run beneath each street and the whole city is underdrained, nearly every house having its sewer connexion. The principal streets are bordered by huge marble columns, though many are broken and others are missing. On some streets, as notably the street of Decumanus Maximus, the visitor can look through these ruined colonnades for a long distance. This street leads from the triumphal arch of Trajan to the Forum, and on both sides are many acres of ruined buildings in all stages of picturesque destruction. Many of the houses gave evidence of beautiful decorations in mosaic and fresco, depicting mythological subjects. There were a spacious market-place, extensive baths, a gymnasium, large theatre, library and forum, Temples of Jupiter and Victory, and the arch erected in honor of the Emperor Trajan, partly in ruins, was a hundred feet high, built of sandstone with marble columns. The many relics here recovered are preserved in a museum, and make an interesting display, the articles being in most cases similar to those found at Pompeii, the foundation of Thoumgadi having been shortly after the destruction of that unfortunate city.

The railway leading to the Sahara goes south-

A Bit of Old Biskra.

ward to the Oasis of Biskra, now a noted French winter resort which is practically in the desert, about 175 miles south of the Mediterranean. Biskra was first brought into notice as the "Beni Mora" in the novel of *The Garden of Allah.* Here is the stony bed of the Oued or dry river Biskra, which becomes a flood in the rainy season, the town being built on a plateau about three hundred feet above the river, with the sand-hills of the desert stretching southward, and the Atlas ranges towering over a mile high in almost perpendicular cliffs to the northward. Here come thousands of visitors for a winter home, so that many large hotels and lodging houses have been built, and all the amusements of fashionable watering place life are provided. There are native Arab villages among the palm trees and the fruit gardens, a fort and church, and this green spot amid the desolation is known as the "Queen of the Sahara" and the "City of the Palm Trees." The cool winter winds from the Atlas mountains temper the heat of the sands and the atmosphere is very dry and clear. To the northward, back whence the railway comes, the view is of a clean-cut rugged outline of mountain ridges against the light blue sky, while to the southward stretches the apparently endless desert which in the distance shines beyond the yellow sands, like a vast, yet still, blue ocean. The winds at times blow wildly here and raise much dust, so that in summer

all the sojourners flee northward to avoid the heat. There is a modern French town, enclosed by walls and entered by gates, and an Arab town of a half-dozen mud villages scattered among the extensive plantations of date palms. Street-car lines connect them, and the whole settlement is a French military post, being their chief station for the eastern Sahara. The oasis is fed by springs from the river, which is dry most of the year, but wells have tapped these springs and provide a supply, the water being slightly alkaline. The palm groves produce five thousand tons of dates every year, an average tree yielding over one hundred pounds. Not far away are the sulphur baths long frequented by the Arabs, the *Hamman Salahin* or "Baths of the Saints."

Out in the desert, a dozen miles from Biskra, is the oasis of Sidi Okba, another plantation of palm trees, with an Arab town of mud walls, its gates strictly closed at nightfall. Sidi Okba was the famous Moslem saint and conqueror, who subjugated all of northern Africa in the first great Arab invasion, and was the creator of "Kairouan the Holy," his shrine in Tunisia. As he progressed in his victorious career, he converted all the nomadic peoples, by telling them they should surely die unless they embraced El Islam, and when he reached the shores of the Atlantic he is said to have ridden into the surf on his Arabian steed, declaring that were it not for this barrier, he would make

the people of every region beyond, worship Allah or die. Many places have been named after this Mohammedan hero, and this oasis has one of his shrines, an ancient mosque, regarded as the oldest Moslem building in Africa. To it the faithful make pilgrimages as to Mecca. Upon this oasis is the Kaid's Garden, a wilderness of aloes and palms, frequented by many of the natives, who have no homes and sleep out doors. These white-gowned Arabs sleep with their heads covered as a protection against the flies that are in swarms in all these green spots of the desert. And as the homeless Arab thus goes to sleep amid these little tormentors, he breathes a prayer for the Caliph Adalma, the terror of the flies, to drive them away. This old Caliph had a breath fatal to flies, so that they dropped dead whenever they flew over his mouth. A favorite sport of the Arabs is racing with their fleet-footed camels, which are so tall and lean that they seem to be mostly legs and can readily run fifteen miles an hour. The usual course is between Biskra and the French outpost station of Touggourt, one hundred and thirty miles southward, and at the end of the railway route on the desert. Here are found several thousand of the Arab nomads around the military station, and there is presented a true oriental picture of their mode of life on this outer frontier of civilization, in the vast expanse of utter desolation making the Sahara.

TUNISIA.

As the traveller moves eastward through Constantine Province, and across the boundary into Tunisia, the whole country discloses a most extensive and varied display of relics and ruins of the Phœnician, Carthaginian and Roman periods. It shows remains of many cities of those days, when there must have been a very large population. This region seems to be strewn with Roman survivals, almost as much as Italy itself, and some of the ancient Roman houses still existing are even yet in possession of the roofs built at that time, and are preserved practically unchanged by their Arab occupants. Tunisia adjoins the Constantine Province on the eastward, beyond the Gulf of Bona, and like Morocco and Algeria is crossed by the Lesser Atlas mountain ranges, which fall sharply off at the seacoast. The Mediterranean shore is prolonged northeastward, with protruding headlands formed by these ranges, and has between two of the long promontories the Gulf of Tunis. Upon its western verge was the location of the renowned city of Carthage, and a little way to the southward at the head of the Gulf is the modern city of Tunis. Forming the southeastern border of this Gulf is the far projecting Cape Bon, and beyond, the shore, turning sharply from the east, trends southward for a long distance. It stretches for

A Moorish Interior.

about three hundred miles to the Gulf of Gabes and makes the widest part of the Mediterranean, by the extensive Sea of Syrtes, thus extended far into the African coast. The prolongation eastward of the two Atlas chains beyond Algeria to the seacoast with the intervening valleys make the regency of Tunisia, which has been a dependency of France since 1881, and is about one hundred and fifty miles wide and three hundred miles long. Between the Lesser and the Greater Atlas lies the extensive valley of the river Mejerda, the ancient Bagradus, the most important river of northern Africa, which after a winding course of nearly three hundred miles, receiving many tributaries from the Atlas fastnesses, falls into the Gulf of Tunis at its northwestern corner near the steep limestone cliffs of Cape Farina. The East Algerian railway coming through the mountain passes from Constantine, traverses this valley to Tunis, and it is a very fertile intervale, displaying many important remains, indicating its prosperity in the time of Carthage and of Rome, the river flowing through the valley to the westward of where Carthage was built. The southern wall of the Mejerda valley and of the Gulf of Tunis is formed by a branch coming up northeastward from the southern Atlas chain, connected by the plateau of Tabessa with Mount Aures, and then stretching out to form the ponderous extremity of Cape Bon, where the massive

promontory falls off abruptly into the sea, and makes the northeastern corner of Tunisia. In this range the highest summits are elevated over 5,000 feet. Another range extends from the southern side of Mount Aures toward the Gulf of Gabes, which was the Roman Syrtes Minor. This fertile and prolific region was one of the most valuable granaries of Rome, it being but a short sea voyage over to Italy. The Bey of Tunis had an independent control of his country until 1881, when to punish cattle thieving a French force came over the border from Algeria and compelled him to accept a French regency and protectorate. Since then his dignity is observed, but his power is gone. Cape Blanc, the northern extremity of Tunisia, is a headland thrust out into the Mediterranean northwest of Tunis, which is the most northern point in Africa.

The city of Tunis, the capital of the regency, is some distance westward from the Gulf of Tunis, being connected with its port, La Goulette, ten miles off, on the Gulf, by a canal. The city is mostly low-lying and built upon an isthmus between two salt lakes, the shallow Boheira or Lake of Tunis to the northeast, and a marshy enclosure toward the southwest. The Boheira is about twelve miles in circumference, and through it, the wide and deep canal recently dug, goes over to La Goulette, piercing the narrow strip of land separating the lake from the sea, and thus providing the passageway for an

extensive commerce. Northward of the canal, in the shallow lagoon, is Shikly island, with the remains of a castle of the time of Charles V, and now the home of flamingoes and other wild birds. The older Arab town of Tunis, of which the walls have mostly disappeared, lies between two more modern suburbs on the north and south, which a century ago were also protected by walls. This older town is called Medina, the northern suburb Bab-Souika, and the southern Bab-Dzira, and they have the usual Arab characteristics of enclosed houses and narrow streets, though the latter are now paved. Since the French occupation, a modern quarter, with wider streets and an European appearance, has sprung up on the side next the harbor, displaying buildings of a superior class. To the westward, on the highest ground of the city, is the Kasbah, an extensive citadel, now used as barracks by the troops, and also dating from the time of Charles V. Within the enclosure is the mosque built on this elevation by Abu Zakariya, who founded the Moorish Hafsita dynasty in 1232, then making Tunis his capital. Afterward Tunis was held by the various Moorish dynasties ruling northern Africa, and in the sixteenth century came under the sovereignty of the Sultan of Turkey, which continued until the French took possession. The city has a population of about 170,000 and the whole Tunisian regency approximates 2,000,000. The Bey has

French officials at the head of all government departments, and the country is garrisoned like Algeria by French troops, although he has a native force of a few hundred men for a guard of honor. Residing at La Marsa, over toward the northeast, on the site of ancient Carthage, the Bey comes into town every Monday to transact business, travelling on a special railway train and coming and going with great pomp, including the exchange of formal salutes with the French officers.

His palace, the Dar el Bey has a number of beautifully decorated rooms, in Moorish arabesque stucco, and fronts a small square with gardens on the street leading to the Kasbah. There is a fine view from the flat palace roof over the white buildings of the city, and the minarets of the many mosques. Some of these mosques are spacious and famous. In the centre of the city is the grand Mosque of the Olive Tree, founded by Abu Zakariya, having many minarets and domes, with a special cloister and library, and it is at the same time a college for about five hundred Moslem students. To the northward, near the walls of the old town, rises the massive dome of Sidi Mahrès, the largest mosque in Tunis, named after this renowned saint who lived in the fifth century after the Hegira, and whose tomb gives the mosque the right of sanctuary for debtors. A chief attraction of the city is the bazaars which retain their oriental character un-

impaired. These adjoin the street leading to the Kasbah, and consist of narrow lanes, vaulted or covered with planks, which are known as Sûks, signifying the various divisions, each of which is usually devoted to the sale of articles of a particular kind. Here is great chance for successful bargaining, and the one who has been to these bazaars suggests, that for the dearer articles, only about one-fourth the amount first asked should be offered as a proper basis for satisfactory negotiation. The suburbs of Tunis are attractive, abounding in beautiful views, and from a hill southeast of the city is given a good outlook, as also from the Belvedere eminence two miles to the northward, where there was a very ancient fortress. The southwestern hill, called the Fort de la Manoubia, provides a wide view over the city, the lake, the port of La Goulette and the ruins of Carthage, with the distant blue sea for the eastern background, and the mountain ranges on the landward side. To the northeastward, and coming out of the western hills, can be traced the ancient aqueduct which supplied Carthage with water. The old palace of the Bardo is about two miles northwest of Tunis, an extensive group of buildings which includes a palace of the Bey that has fallen in some decay. Here are some excellent specimens of carved and painted ceilings of tiles, and reproductions of the carved stucco work which is seen in perfection at the

Granada Alhambra. There is also an attractive "Lion Court." In the Museum are Carthaginian and Roman antiquities in a government collection, with specimens of Roman mosaics and Saracenic art. At the port of La Goulette is a convict prison on the cliffs, where in June, 1905, seventeen armed convicts managed to dig their way through the walls and escape. The sentries sounded an alarm, and a force of wardens went after them making a desperate battle on the terrace adjoining the prison on top of the cliffs. One convict was killed and another dashed to pieces by falling over the rocks. Six who were wounded were captured and the others escaped.

ANCIENT CARTHAGE.

To the northeast of Tunis, about fifteen miles, is the most famous locality of remote memory in Northern Africa, the ruins of Carthage. The steamer coming across the sea to Tunis enters the Gulf of Tunis, its waters given a yellowish tinge by the overflow of the great river Medjerda, and rounding Sidi Boa Said, on Cape Carthage, passes the Byrsa or Castle-hill of Carthage, now surmounted by a large modern Cathedral. A little way to the southward was the ancient harbor, down by the sea, where the coast is now fringed with various villas and palaces. The Phœnicians were the early settlers of Carthage, long before the

foundation of Rome, it being the *Keroth-Hadeshoth,* or "new city." The tradition is that about 878 B. C., Dido, fleeing from ancient Tyre, landed on this part of the coast, and was welcomed by the inhabitants, who agreed to give her as much land as could be compassed by an ox-hide. The enterprising lady cut the hide into narrow thongs, and fastening them together, made a long cord with which she enclosed a large tract of land. Dido was the sister of Pygmalion, the king of Tyre, and he had murdered her husband Acerbas before the altar, in order to seize his wealth. But Dido thwarted this by suddenly setting sail from Tyre, with all her possessions and her faithful companions, bound for the Tyrian colony of Utica, which was on the ancient river Bagradus near where she landed. Here she built the original citadel on the Byrsa hill, and founded Carthage, of which she became the queen, and where she was afterward worshipped as a goddess. The place grew, and its power extended over all the shores of the western Mediterranean. As it expanded, it came into conflict at first with the Greeks, who then held the neighboring island of Sicily, and afterward with the Romans. The latter called its people the Punici, referring both to the "red men" living in the region, and the palms growing luxuriantly there, while the Carthaginians themselves styled their tribe as Canaanites, or "dwellers on the plain." For five centuries or

more it was the greatest Mediterranean power, and under Hannibal and Hanno, its troops almost exterminated Rome. But the latter ultimately conquered, Scipio, 146 B. C., capturing and destroying the famous city. The Emperor Augustus made it a Roman colony, and the great fertility of the Bagradus valley gave it such prosperity that it became the third city in the Roman empire. When that empire fell to pieces, the Vandals got possession, and it became Genseric's capital. Belisarius took it, and then the Mohammedan invasion in the seventh century again captured and destroyed the city. Continuing under Arab rule, the pirate brothers Barbarossa conquered it in the sixteenth century, and when France got Tunisia its ruins came into the possession of that country.

There are extensive Roman remains, distributed over a large surface, but owing to the repeated destructions, the actual outline of the ancient city is no longer visible, while even the site itself has undergone repeated changes. At present, the most conspicuous objects are the buildings of modern construction on the hill of the Byrsa. St. Louis, the King of France died here in 1270, while engaged in a crusade against the Moors in Tunis, and in 1841 the French erected the small chapel of St. Louis in his memory. Cardinal Lavigeric, who was subsequently in charge of the mission, built the present cathedral, which stands up prominently in

the architectural guise of an oriental Moorish music hall, the Cardinal's idea being that if he made his cathedral as much as possible like a highly ornamented and floridly showy mosque, he might the more easily induce the Arabs to worship in it. There are also a large hotel on the hill, and a French chalet, built in imitation of a castle donjon. This hill of the ancient citadel, with its surmounting cathedral, is a conspicuous object seen from afar, and it gives a wide view over a splendid landscape of mountain, plain, lake, orchards, gardens and the broad sea. There is a museum of Phœnician art antiquities and Roman and Byzantine remains. Spacious cemeteries cover the adjacent surfaces, and here are buried in layers the ancient Byzantines, Romans and Carthaginians, the latter, who were of Phœnician extraction, being at the bottom. Extensive excavations begun in 1892 under the auspices of the church prelates have disclosed much of the ancient ruins. There are traceable the remains of an amphitheatre and circus, fragments of the old city walls, aqueducts and many cisterns used for water storage. The harbor was about a half mile south of the Byrsa hill, composed of two ports, a commercial and a naval haven, and it was here that Scipio landed and had his chief contest, fighting through the narrow streets as he advanced to the storming and capture of the citadel on the hill. To the northeastward stretches the Peninsula of Cape

Carthage, rising nearly four hundred feet above the sea, where the extremity abruptly ends, its high lighthouse giving a grand outlook.

The original Phœnician settlement in Tunisia, the ancient Utica, is twenty-one miles northwest of Tunis, on the estuary of the Medjerda. Here was founded the original Phœnician seaport colony 1100 B. C., then connected with the sea by the Bagradus, but the river's course has since been deviated eastward, so that the scant remains of Utica are now fully five miles from the sea. This was the seat of a Roman proconsul, and here, when Cæsar overthrew Pompey, the younger Cato killed himself 46 B. C. Out on the coast, farther northwest, is the Arab town of Biserta, on the most northern land in Africa, the ancient *Hippo Diarrhytos.* The French have strongly fortified its harbor where Charles V built a fortress in the sixteenth century. Off Biserta in October, 1906, the French submarine boat Lutin was sunk with a crew of fifteen officers and men, all of whom were drowned, though some had survived under water for thirty hours judging by the signals they made.

HOLY KAIROUAN.

The mountains of Zaghouan, to the southward, supply Tunis with water, as they did ancient Carthage, and extensive remains still exist of the aqueduct leading thence in the Roman days. The

highest summit, the Djebol Zaghouan, rises 4,245 feet. To the southward is the large town of Susa or Suisse, as the French call it, in a district that is the home of various nomadic tribes, while to the southwest is the famous city of Kairouan. This, regarded by the Mohammedans as the most holy city in Africa, is about eighty miles south of Tunis, and was founded by the great leader and saint, Sidi Okba, who, as heretofore stated, led the overwhelming Moslem invasion in the seventh century, which captured for the followers of the Prophet, the whole northern part of the continent. It is situated upon a height some distance inland from the sea, that commands an extensive sandy plain, and has to the eastward the Kairouan Lake, its feeding stream flowing past the city. As usual with the Arab settlements, the original town is surrounded by walls and has a gate on each side. It is well built and contains various stately structures including mosques and tombs. It is one of the few places where the stranger is admitted to the mosques, this privilege being secured by the endorsement of the French ruler of the city. The great Akbar mosque, founded by Sidi Okba, and supposed to be his shrine and actual burial place, occupies a large part of the enclosed city, the roof being supported by over three hundred antique columns of marble, granite and porphyry, its minaret towering in three stories, and there being a large interior court and imposing

prayer hall. The smaller Amer-Abbada mosque has six domes, while outside the walls, beyond the north-eastern gate, is the mosque of Sidi Sahab, a companion of Mohammed, whose magnificent Arabic tomb is an object of pilgrimages. It is here that the performances take place on certain fixed days by the flagellant Moslem sect of the Aioussa, while on other days they are not unwilling to go through the self-inflicted stripes for a fee of thirty francs. The water supply of Kairouan comes from the hills and is collected in an open reservoir, built as a polygon of sixty-four sides, each extending eighteen feet and called the cistern of *Ibrahim ben Aglab*. This venerable city, founded about the year 670, grew with rapid strides, and in the ninth and tenth centuries was the capital of all the Moslem conquests in Northern Africa. Its population then exceeded sixty thousand, but is estimated now only at twenty thousand. Their Moslem rule is still very strict and they forbid merchants of other faiths from becoming permanent residents. The place is reached by caravans and the modern autocars over good roads, and the prominent manufactures are yellow morocco boots and slippers.

About forty miles south of Susa and near the coast is the ancient Roman Thysdros, now known as El Djem, a little Arab village of mud huts, having near it an enormous amphitheatre, almost as big as the Roman Colosseum, the greater part of which is still

standing. It covers about six acres, and would have accommodated sixty thousand people, and for centuries has been a stone quarry for all the plundering races who ruled the land and sought building stone. Thysdros was a large Roman city in the third century, but the Arabs destroyed almost everything after the Moslem conquest, and the mosaics from the enormous amphitheatre have been taken away to various museums, the spacious mosaic which covered the arena being on the Bey's Palace at Tunis. Extensive excavations are being made and restorations planned here under French auspices. Farther south and on a good harbor is Sfax, the capital of Southern Tunisia, which has fifty thousand people including some Europeans, a city surrounded by huge walls and entered through imposing gates, as are all the Arab towns of Tunisia. The streets are narrow and crooked, the houses of the usual Arabian style, and the people are very jealous of the Christians. The French maintain a garrison for their protection. This whole country is full of Roman remains and was very populous in their day of greatest power.

TRIPOLI.

The sea to the eastward of the northern extremity of Tunisia, between its coasts and Sicily and Malta, is known as the Sicilian Sea. Southward of this, the Mediterranean has a long projection into Northern Africa, making its widest part, and this is

the Sea of Syrtes, which was a part of the ancient Libyan Sea, the portion of the Mediterranean, now regarded as its eastern half, stretching from the coast of Tunisia to Crete and Egypt. The Sea of Syrtes spreads in two large gulfs, the southwestern being the Gulf of Gabes, and the southeastern and more expansive, the Gulf of Sidra. In the early records these are frequently written about, and were known as the Syrtes Minor and the Syrtes Major. They were very dangerous to old-time navigators, because of shallowness, quicksands, and the uncertainties of tides. The Gulf of Gabes, named from the town on its shore, indents the southern portion of the Tunisian east coast, and is about one hundred miles wide, between Caput Vadorum, the *Ras Kapudiah,* on the north and Jerbah island on the south. The larger Gulf of Sidra, on the northern coast of Tripoli, to the eastward, extends for about two hundred and seventy miles, between the promontory of Cephalæ, now the *Ras Kasr Hamet* on the west, and the promontory of Boreum, the *Ras Teyonas* on the east, and it stretches inland over one hundred miles. The region between the two gulfs is mostly a narrow sandy or marshy strip of land, anciently known as Syrtica. Its original people were various nomadic Libyan tribes living inland, with Egyptians and Phœnicians on the coast. To the west was Carthage, and to the east Cyrene, and they long contended for its mastery, Carthage ultimately succeeding, it is

said, through the self-sacrifice of the brothers Philæni.

The land bordering the Sea of Syrtes, eastward from Tunisia, is now the Turkish vilayet or regency of Tripoli. The headland of the *Ras Agir,* is the Tunisian frontier on the west. For some distance eastward, the low and sandy shores of ancient Syrtica, along this coast, are regarded as really a part of the great Sahara, thus stretching up to the sea, though the actual desert is not strictly considered as being nearer than about eighty miles southward. Farther eastward are the deeply indented shores of the wide Gulf of Sidra, while beyond is the Libyan desert, extending over to the Egyptian frontier. Before 700 B. C., the enterprising Phœnicians had founded on these coasts three great cities — Œa, Sabrata, and Leptis Magna, and from these the region became known as Tripolitana. Later, Œa, which was between the two others, was made the capital of a province, that was then called Tripolis, or " the three cities," thus combined into one, and this name has been retained since the Roman times. Tripoli is consequently one of the oldest places in the world, and its business stability has been largely due to its advantageous position on the sea coast over against Sicily, and at the northern termination of the great historic caravan routes, leading into the heart of Africa, and to the various oases of the eastern Sahara and Libyan deserts. The province is composed of

a strip of fertile soil adjacent to the sea, with extensive sandy plains, and parallel chains of rocky mountains inland, which are extensions of the Atlas ranges coming over from Tunisia. The city of Tripoli is on a promontory, forming the southwest side of a small crescent-shaped bay, that is partly sheltered from the northern winds coming across the Mediterranean, by a chain of low reefs. The roadstead is shallow, while the bar makes it inaccessible for vessels of very deep draught. A partly crumbling crenellated enceinte wall surrounds the older town, in the form of an irregular pentagon; and a line of small half-ruined forts is supposed to protect one side of the harbor, and the governor's old-time castle, the other. There is a population estimated at thirty thousand within the walls, and about an equal number of semi-nomad Arabs and negro freedmen in the suburban districts outside. The desert almost touches the city on its western verge, while to the eastward spreads the verdant and fertile oasis of Meshiga, with a nomadic population who pay great respect to the tombs there, of the ancient Tripolitan beys and their sultanas. Within the city are several prominent mosques, of which six have lofty and attractive minarets built in Turkish style. There is not much to attract, however; it is a typical Moorish city, with narrow, dirty and unpaved streets.

Southward from Tripoli, to which it is tributary,

and enclosed all around by the Sahara, is Fezzan, the ancient Phazania, the land of the Geramentes. It is an extensive region, and practically a desert, almost barren of vegetation because of the want of moisture and the great heat. With ill-defined boundaries, it extends southward from latitude 31°N to 23°N. The depressed table land of Moorzook occupies the central and southern portion of the district, being at a lower level than the surrounding desert. Moorzook has about three thousand population and is the Sultan's place of residence. Fezzan has the reputation of intense heat in summer, the mercury sometimes rising to 133°. It has no running streams of water, rain seldom falls, and the climate is unhealthy for Europeans. As the caravan route from the coast to the interior of Africa passes through, the people depend upon this trade for a livelihood. It requires about twenty-five days for a caravan to traverse the route from Tripoli to Moorzook and forty days more to go on to Cairo. The natives are mostly Berbers, who have very little idea of arithmetic, and reckon everything by making dots in the sand, ten in a line, with Spanish coins and grain as their medium of exchange. The Roman proconsul of Africa, before the Christian era, Cornelius Balbus, penetrated into Phazania, and it displays many remains of the Roman occupation, in the form of columns and mausoleums. The Arabs got possession in the seventh century, and it has since

been generally tributary to some Moslem potentate, the present allegiance to Tripoli beginning in 1811. It has been a favorite haunt, in more recent times, of exploring African travellers, though they do not seem to have gleaned much information or trophies of special interest, and chiefly report the great heat.

To the eastward of the deeply indented Gulf of Sidra is Barca, which was the ancient Cyrenaica, its western boundary being the Syrtes Major. This in its early history was one of the most flourishing colonies of the Greeks, Battus, a Dorian from the island of Thera, having founded the original settlement of Cyrene in the seventh century B. C., his dynasty ruling for more than two hundred years. It afterward was subject to Egypt and then became a province of the Byzantine empire, being conquered by the Arabs in 541. Barca extends eastward to the frontier of Egypt, and its southern border fades into the great Libyan desert. There are about 400,000 people in the country, generally Berbers and nomadic Arabs. The northwestern district, toward the coast, is elevated and fertile with a healthy climate, but the remainder of the surface is sandy, barren, and gradually merges by an indefinite boundary into the desert. The Barcan beys are tributary to Tripoli. Its most important town is Benghazi, on the northwestern coast, the ancient Berenice, at the southern extremity of a headland projecting into the Gulf of Sidra, which formerly enclosed a spacious natural

harbor, now filled up and almost inaccessible for large vessels. Northeastward from Benghazi, the coast abounds in extensive ruins left by the ancient civilizations. Here was the old town of Ptolemais, which passed away after the second century, the place being now a collection of ruins known as Tolmata. Farther eastward is Mersa Susa, the ancient Apollonia, which was the port of Cyrene, now Grenna, to the southward. This port it is proposed to restore, there having been removed to the healthy and fertile adjacent district, many of the Turkish inhabitants of the island of Crete, who were dissatisfied with its modern government. The famous city of Cyrene, was built upon a high plateau about nine miles inland from the coast at Apollonia, being founded around a copious fountain, the native name of which was Cyre. The spring supplied the settlement with water, and was consecrated to Apollo. There are still visible extensive ruins of streets, temples, theatres, tombs, art remnants, a vast necropolis, and the road over the rocky plateau connecting the city with the harbor. Cyrene was at the height of its prosperity in the time of Herodotus, and then covered an extensive surface, its ruined walls and towers having a circuit of five miles. Here flourished the Cyrenaic school of philosophy, founded in the fourth century B. C. by Aristippus, who taught that personal enjoyment was the highest object, and that virtue consisted in producing the greatest pos-

sible development of agreeable feelings, by living with a moderate activity, in the enjoyment of art and literature, and the careful avoidance of pain. The astronomer Eratosthenes was a native of Cyrene.

THE VAST SAHARA.

We have thus traced the Barbary Coast from the Atlantic eastward to the borders of Egypt, and find that the fertile districts fringing the Mediterranean shore, everywhere, as they extend southward, gradually merge into the vast African desert. This great Sahara occupies an area of over 2,100,000 square miles, stretching across northern Africa, from the Atlantic three thousand miles to the Valley of the Nile, with a width of about a thousand miles from the Barbary states southward to the Soudan. The sterile region is renewed eastward of the Nile, and it extends northward into Algeria along the southern base of the Atlas, closely approaching the Mediterranean coast west of the Gulf of Gabes. Here are extensive marshy sections known as *Shotts,* which constitute a basin, into which, as it is at a lower level, a plan has been projected for admitting the waters of the sea by a canal. There are also continuations of the Sahara, extending east and north, through Arabia, Persia and Central Asia, into Mongolia, terminating there in the desert of Gobi. Extensive tracts of treeless pasture lands skirt the northern Sahara boundary along the base of the greater Atlas

ranges, and the desert also reaches the Mediterranean shore on the Gulf of Sidra. Rain is unknown in this great desert, excepting in the oases and the bordering mountain regions, and a climate of burning aridity pervades. When rain falls on the borders on rare occasions, it is with such violence as to produce torrents, suddenly pouring through the valleys and as suddenly disappearing. The Sahara sterility is attributable to the fact that the northeastern trade winds, blowing over its surface — the prevailing air currents — bring it no moisture, having been almost drained of vapor in their long journey over Europe and Asia. These winds deposit on the Atlas mountains, south of the Mediterranean, more moisture than they have collected in their brief passage over that sea, and when they reach the heated desert beyond, where the absorptive capacity of the air is greatly increased by the higher temperature, they actually carry away moisture instead of bringing it, and this is not condensed into clouds and rains, until the wind currents reach the colder surface of the mountains of Central Africa. The Sahara is subject to the highest temperature on the globe, the mercury, as in Fezzan, reaching 133°. This terrific heat, with the loose and burning sands, imparts their dreaded characteristics to the two hot and deadly winds blowing off the desert, the sirocco and the simoom. The sirocco is a southeastern wind of a suffocating and parching heat, which at intervals, es-

pecially in spring and autumn, blows with violence from the Sahara, over the Mediterranean coast and islands and southern Italy, continuing for two or three days, and sometimes for a week, with most pernicious influence on animal and vegetable life. It is hottest in Malta and Sicily, though generally of short duration on these islands. While having little effect either on temperature or barometer, the sirocco produces a sensation of terrible heat and suffocation, copious perspiration and general prostration. The even more deadly simoom gets its name from the Arabic word *somma* "to poison." It is a hot, dry wind, characterized by excessive heats and suffocating effects, often fatal to animal life, but rarely lasting over an hour. During its prevalence, the people of oases shut themselves up in their houses, and those who are on the desert go into tents or pits. The parching heat is derived from the sands, which are whirled up by the advancing wind, and the air is filled with an extremely penetrating and subtle dust. When this deadly wind blows in squalls, death is often suddenly produced by actual suffocation with severe hemorrhages. Persons exposed to it, protect themselves by stopping the nose and mouth with handkerchiefs, and the camels instinctively bury their nostrils in the sands.

The surface of the Sahara presents an alternative of immense burning wastes of loose and moving sands, with plains of stony gravel and tracts of bar-

ren rock, much of it covered with salt deposits. There are elevated and rocky plateaus, rising into mountains, with spreading valleys and great expanses of sand between them. The Sahara has an average elevation above sea level, estimated at fifteen hundred feet, although in many places the surface is depressed far below the ocean. The most mountainous portion is along the caravan routes from Tripoli southward and southeastward, where the culminating summits are in the mountains of the Asbea oasis, rising 5,000 feet. The desolate region of the western Sahara, known as *Sahel* or "the plain," has the greatest expanse of sand and salt desert. Its hills stretch out to the Atlantic, and it has but few oases and these are small, there being little travel over it. Eastward of Fezzan, the Sahara is known as the Libyan desert, being comparatively level, and sloping toward the Mediterranean with a gentle descent, and here the oases are most numerous. Despite the difficulties of travel, the desert is being constantly crossed in all directions by caravans of traders on various routes. The theory of the geologist is that at one time a large portion of the Sahara was submerged beneath the sea. Marine shells have been discovered south of the Atlas, and lines of sea beach are traceable, showing that in a not very remote geological period these plains were an ocean bed. Sir Charles Lyell has said that the Sahara, between 20° and 30° north latitude, was under water during the

glacial epoch, so that then there was a water connexion between the southern part of the Mediterranean, and the Atlantic ocean west of the African coast. A project has been formed for converting this part of the *Sahel,* covering about 126,000 square miles, into an inland sea, by cutting a canal through the fringe of sandhills, forming the western desert border south of Morocco.

The oasis is the relief for the desert, and these attractive places are the beloved havens of the wandering Arabs who slowly cross the sands. The name of the oasis is derived from the Coptic word *Uah* signifying an inhabited place, and was the title given anciently to the fertile spots where the caravans stopped. They were then supposed to be islands rising from an ocean of sand, but in fact they are generally depressions in the midst of a table land, resting usually on a bed of limestone, whose precipitous sides encircle the hollow plain, in the centre of which is a stratum of sand and clay, retaining the waters flowing from the surrounding cliffs. Most of the best known oases are in the Libyan desert, in fertile tracts supporting a moderate population, and nearly all having an extensive growth of date palms and also grain fields. These Libyan oases were early occupied by the Greeks and Romans, and usually then were places of banishment for State criminals, while afterward they became refuges from persecution. There are a multitude of small, and more than thirty,

large oases in the Sahara, about twenty being inhabited, the best known being in the Libyan desert, over toward the Egyptian frontier.

Perhaps the most famous oasis is Siwah, the ancient Ammonium, in the disputed Libyan territory between Tripoli and Egypt, about one hundred and sixty miles from the Mediterranean and three hundred and thirty miles west-southwest of Cairo. There are several detached fertile tracts, the principal being about eight miles long and three miles wide. The surface is undulating and rises to the northward into high limestone hills. There are numerous springs and ponds, both salt and fresh, the climate being delightful, and the land very fertile, with the chief product dates. The people are all Moslems, and are Berbers and negroes, there being about eight thousand of them, and they are tributary to Egypt. There are various villages, the chief being Siwah el-Kebir, defended by strong walls, with the citadel crowning a rock, divided into an upper and a lower town, the streets, as in all Moorish towns, being irregular and narrow. It is said that no stranger is admitted to the upper town, nor are the native bachelors permitted to live there. This was the ancient site of the famous spring—"the fountain of the sun"—whose waters were cold at noon, and hot at evening, midnight and morning, and here was the temple of Jupiter Ammon. The ruins of this temple, now called Om Baydah, are about three miles

southeast of the village, there being among the remains various sculptures of Ammon, with the delineations of the ram-headed goat. Nearby is the pool, which is supposed to be the ancient fountain, springs copiously feeding the basin which is about three hundred feet in circumference. The waters are said still to be warmer by night than by day, and they are heavier than those of the Nile. There are other ruins in the neighborhood, with Greek, Roman and Egyptian inscriptions. In the olden time, this oasis was celebrated as the seat of the oracle of Ammon, and besides the temple, with its images of Jupiter Ammon set with precious stones, it had a royal castle surrounded by three walls. The great Cambyses made an unsuccessful attempt to take the temple, and 331 B. C. Alexander the Great marched over the desert to visit the oracle, and the priest addressed him as the son of the god Jupiter. The Emperor Justinian built here a Christian church, but everything now is Moslem. To the southeast of Siwah is the ancient Oasis Minor, now Bahryeh, which has temples and tombs belonging to the era of the Ptolemies. This, in the Roman times, was famed for its wheat, but now produces chiefly fruits. Farther south is the Oasis Trinytheos, the modern Dahkel, which has Roman remains. Still farther south, and about ninety miles west of the Nile, is the largest of all, the Oasis Magna, the modern Khargeh, which stretches over a surface eighty miles long and

ten miles broad. This is sometimes called the Oasis of Thebes, which is to the northeast. Josephus called it "the Oasis," and Herodotus "the City Oasis" and the "island of the blessed." There was an ancient temple of great size here, dedicated to Ammon-Ra, and after the Christian era it became noted for the number of its churches and monasteries.

In the western Sahara, the most important oasis is Tafilet, which in reality is a number of separate oases that have numerous fortified Arab villages enclosed by walls, and inhabited by a warlike race of fanatical Moslems. This oasis is situated southeast of the Atlas mountains, on the borders of Morocco and the Sahara, the population being estimated at a hundred thousand. In 1648, a ruler of Tafilet founded the dynasty which now attempts to govern Morocco, but the present chiefs of the oasis are usually in opposition to the Moroccan Sultan, defying his authority. It is a fertile region, watered by two rivers, both losing themselves in the desert sands outside its borders. Rain seldom falls. Grain is raised on the banks of the rivers and there are extensive plantations of date palms, producing the best dates of the Sahara, which are in demand everywhere. Large flocks of sheep and goats are kept, and woolens and carpets are woven. There also are mines of lead and antimony. The capital, Abuam, which has the largest market in the western Sahara, is about two hundred and forty miles east-southeast from Morocco

City. There is a good trade with Algeria, and twice a year an immense caravan crosses the desert to Timbuctoo, a thousand miles southward. Another great oasis, almost in the centre of the western Sahara, is Tuat, composed of five large groups of green spots, with one hundred and twenty thousand Arab and negro population. It raises opium, tobacco and cotton, as well as grain. This group, controlled by the French, is about eight hundred miles south of Algiers. The French control is gradually covering the whole of the Western Sahara. The wandering tribes of the Tauregs, the special nomads of the desert, whose tradition says they came originally from Canaan, are the race of Arabs whose bands are chiefly found in this part of the Sahara. They are bold, warlike and predatory, living mostly on booty and tribute levied on caravans crossing the desert, and they have given the French endless trouble. They possess excellent firearms and go about always with veiled faces, riding swiftly on their *meharis* or long-legged racing camels. Until the French adopted these swift camels for their cavalry, they were utterly unable to cope with the Tauregs, but now they can move with the same celerity as these wily nomads, and can overtake and circumvent them. Thus many of these wild bands have been tamed and brought into subjection. The French are gradually establishing stations at various points in the desert, and are contemplating an extension of the railway south-

ward beyond Biskra and Touggourt, to Tuat, and possibly ultimately across the Sahara to Timbuctoo.

The Sahara, while a burning desert waste, is only so because of the want of water. If water could be supplied in ample volume this would become one of the earth's most luxuriant gardens. Its soil is highly charged with fertilizers, and the Arabs say that if you will plant a stick in the desert and water it, you will soon have a tree. The hopes, however, of changing the desert, can hardly be realized, until some natural phenomenon may intervene to produce moist winds and copious rains. The Arab nomads will probably continue indefinitely as its inhabitants, and it will be a long while before the two or three months' caravan journey between the Barbary States and the Soudan can be replaced by a railway train crossing in three or four days. The picturesque Arab is enabled to wander over the wastes of the Sahara, only by the assistance of his patient servant, the camel, which has been well termed in the florid oriental style, the "ship of the desert." Its clumsy-looking wide-spreading feet, prevent it from sinking too far into the sand, and they give it an elastic and silent gait that is peculiar to itself. Its nostrils may be closed at will, to exclude the wind-driven sands of the deadly simoom. The hump on the back is a storehouse of food, which is slowly reabsorbed during the long marches, and protects it from starvation in the unavoidable privations of the desert journeys. It

is also able to fill interior cavities of the stomach with water, to the amount of several quarts, thus carrying within itself a supply for its own wants that will last without replenishment about a week, and which it occasionally yields with its life to save its master. Thus this patient and most wonderful animal has enabled the desert to be explored and traversed, and has given mankind probably the best lessons known of exemplary patience and protracted endurance to hardships. To those who traverse the Sahara's trackless wastes the absence of moisture is probably the most impressive, and it recalls Byron's lines in *Don Juan:*

> Till taught by pain,
> Men really know not what good water's worth;
> If you had been in Turkey or in Spain,
> Or with a famished boat's crew had your berth,
> Or in the desert heard the camel's bell,
> You'd wish yourself where Truth is — in a well.

THE IBERIAN SHORE

IV.

THE IBERIAN SHORE

The Iberi—Almeria—Aguilas—Lorca—Cape Palos—La Union—Cartagena—The Despoblado—Murcia—Torrevieja—The Segura—Orihuela—Elche—Alicante—Kingdom of Valencia—Irrigation Works—Alcoy—Concentaina—Monte Mongo—Denia—Gandia—Jativa—The Borgias—The Albufera—Valencia—Sagunto—Segorbe—Almenara—Villareal—Castellon Peniscola—Morella—Uldecona—Cape Tortosa—The Ebro—Tortosa—Alcaniz—Imperial Canal of Aragon—Saragossa—St. James—Virgin del Pilar—Maid of Saragossa—Catalonia—Tarragona—Reus—Lérida—Cardona—Montana de Sal—Montserrat—Barcelona—The Bull Ring—Besós Valley—Vich—Ripoli—Gerona—The Ampurdan—Figueras—Gulf de Rosas—Emporiæ—The Pyrenees.

ALMERIA AND CARTAGENA.

Eastward from the Rock of Gibraltar to Cape Gata, and then northeast past Cape Palos, the Mediterranean coast of Spain stretches seven hundred and seventy miles to the Pyrenees and the French boundary. From Gibraltar to Cape Palos it is mostly a rocky shore with little elevation, but has in the background the noble summits of the snow-capped Sierra Nevada range set boldly against the northern sky. Beyond the cape, the coast line is alternately high and low, part of it lined with lagoons, along

which are various salt works. Eastward from Malaga, the coast borders the province of Almeria, to its deeply indented bay where Cape Gata forms the eastern buttress. The Phœnicians were the first to visit these shores, and they were soon followed by the Greeks, who established colonies, and found the primitive inhabitants to be the tribes whom they named the Iberi, and thus this region came to be the Iberian shore, a title afterward extended over the whole Spanish peninsula. These Iberi were the people of Spain at the dawn of history, and in the earliest period of which tradition has told, and they then gave the rivers, mountains and towns many of the names they still bear. They were a fierce race, whose power and characteristics were never entirely broken by any of the numerous invading peoples that in subsequent times occupied the rest of the country, and they laid the foundation for the proud and brave Castilian race. The Celts also came early and occupied the mountainous districts of central Spain, first fighting and then uniting with the Iberians of the coast, to form the race known as Celtiberians. The Greeks upon their arrival settled Saguntum in Valencia and Emporiæ on the northeastern coast of Catalonia, soon commingling with the native Iberians, who were then active in commerce with the Carthaginians across the Mediterranean Sea. Their country's chief fame in the early days was its riches in gold, silver, copper and other metals, and the people

were diligent miners and noted for artistic skill in working precious metals. They had a language and an alphabet, and also made their own coinage, many of these ancient coins being still preserved in museums. The great river of the Iberian shore, the Iberus, is now the Ebro flowing eastward into the Mediterranean at Cape Tortosa.

The display of Iberian wealth attracted the Carthaginians, and they came over from Africa to occupy the country and found colonies on the coast, led by their generals Hamilcar and Hasdrubal. This invasion was not relished, and the Iberians and Greeks of Saguntum and other places asked the Romans to help them. The result soon produced the first Punic War between Rome and Carthage, and led finally to the famous siege and destruction of Saguntum by Hannibal 219 B. C., which opened the second Punic War, the end of which was the expulsion of the Carthaginians from Spain. Then came the era of Roman domination over the Iberians, accompanied by various revolts and contests, but in the period immediately preceding Christian times, they began gradually adopting the Roman manners, dress and language, and ultimately became an integral part of the Roman empire. As a race, however, they were always renowned for their unyielding disposition and obstinate courage, which are prominently the Castilian characteristic now.

Down out of the Sierra Nevada through a most

picturesque valley rushes the swift Almeria torrent, its lower intervale broadening into one of the most fertile and luxuriant *vegas* in southern Spain. The extensive province of Almeria, through which it flows, is broken by mountains and ravines, containing mines of silver, lead, copper and coal, making it rich in minerals, so that mining is a prominent industry, though the mines are still usually worked in a most primitive way, and the delvers in them to-day learn that they had been worked in a remote age, there being found the round shafts anciently operated by the Phœnicians and the square shafts of the Moors. The fertile *vegas* in the valleys are well irrigated by systems originally established by the Moors, and it is said these irrigation canals and waterwheels remain substantially as then in most cases, and thoroughly overcome the prolonged droughts that prevail nearly every summer in the districts of Malaga and Almeria. The river flows into the deeply indented Gulf of Almeria, and at the embouchure, about a hundred miles east of Malaga, is the ancient city of Almeria, formerly the chief port on this coast, and a very prosperous city in the Moorish era. Environed by high mountains, which rise over 6,500 feet in the background, this city is beautifully situated, the enclosing Sierra running off at a height of 1,680 feet toward the southeast, where it terminates in the bounding buttress of the bay on that side, the ponderous Cape Gata. The Iberians were established here when the

town's history began, and their successors, knowing the importance of the port, made it prosperous in the days of the Carthaginians and the Romans, the latter calling it Urci. It grew in wealth under the Moors, and for three centuries the Christians tried to capture it. Alfonso VII of Castile briefly held it in the twelfth century, but it was not finally taken until 1481, when Ferdinand the Catholic captured it, the last stronghold of El Zagal of Granada. An ancient Moorish Alcazaba, with impressive towers enlarged by the Spaniards, and a partly decayed Castle of St. Christopher, dominate the town, where there are about fifty thousand population. There is a massive cathedral built like a fortress, with embattled walls and belfry tower, and castellated apse, a work of Charles V; and the principal mosque is now superseded by the Church of San Pedro. The harbor is small, but safe, and from it are shipped large amounts of ores from the mines, and fruits and nuts from the luxuriant *vega,* including enormous consignments of the famous Almeria grapes.

Rounding the ponderous Cape Gata, the coast trends northeast, and is a series of cliffs, fronting the Sierras which stretch for miles, until finally they recede from the shore, and here is the port of Aguilas, whence are exported various cargoes of the mineral output of these mountains. In the interior, behind the coast ranges, is Lorca, finely situated on their northwestern slopes and having sixty thousand people.

This was the Roman Eliocroca, a name which the Moorish successors condensed into Lorca, and in the midst of the narrow streets and crowded houses of the older town rises the Moorish castle. Here came the robust king Alfonso in 1244 and captured the place from the Moors, the city arms displaying his bust and a tower, named from him the Alfonsina. The mines and the vineyards give the people employment. To the eastward of Lorca, the foothills, which are the last of the Sierra Nevada ranges, stretch out toward the sea, and prolong the coast into the protruding Cape Palos, surmounted by an excellent lighthouse. From this there extends northward a flat sand-spit with some rocky islets for about twenty-five miles, which enclose the extensive salt lagoon of the Mar Menor, spreading back for a width of about twelve miles to the higher level. To the southward, and behind Cape Palos, there is a deep bay among the hills, and here is the noted port and Spanish naval stronghold of Cartagena. About five miles away, and enclosed in the Sierra de Cartagena, which terminates in Cape Palos, is La Union, the port of that extensive mining district which sends out silver, lead, tin and large amounts of manganese and iron ores. A population of thirty thousand are employed in these mines, which were known to the Carthaginians and the Romans, and were visited and described by Polybius in the second century B. C.

The Iberians were here from time immemorial,

and in their trading with the Carthaginians across the sea, the fame of the silver and other mines became a marvel. This led Hasdrubal, the son-in-law and successor of Hamilcar, to come over from Carthage and explore the region. He found a harbor much resembling that of his own capital, and admiring the situation, took possession and established at the Iberian settlement the New Carthage, 221 B. C., which afterward became a Roman stronghold, the Kartadjena of the Moors and the Spanish Cartagena. This was intended to be the new royal capital, and the citadel of Carthaginian power in Iberia, and they held it until it was captured by the Romans under Scipio Africanus Major, about twelve years later. Polybius came with Scipio the younger in 151 B. C., and has left an accurate description of the town and harbor, its castle of Hamilcar Barca and the Temple of Esculapius. The Romans made it the richest and largest town of their province of Hispania, and a colony, and it was one of the last supports of the Byzantine empire in Spain, being successfully defended, in the later sixth century, against the attacks of the barbarians. The Moors, however, ultimately got possession, and held it until Jaime I of Aragon became the captor in 1276. Cardinal Ximenes sailed from Cartagena in 1509, for his attack on Oran and Algiers on the Barbary coast, and the English admiral Drake sacked it in 1585. The town had many Roman and other ancient inscriptions, but

they have been mostly removed to the Madrid Museum. The old harbor, which resembles that of Carthage, is now the Darsena or Basin of the Arsenal, this being the chief attraction of the city, and an extensive naval construction of the later nineteenth century. High hills surround the town, and the deeply indented bay into which this basin opens is well protected by forts. On either side of the entrance, rise the Hill of Galeras, 650 feet, crowned by a castle, and the Castle of St. Julian, 920 feet, both being precipitous volcanic cliffs, surmounted by strong forts. Upon the former was anciently the Castle of Hamilcar Barca, and upon the latter the Temple of Esculapius. Alongside the Arsenal is the hill of the Conception, 230 feet, covered with many ruins, and having on the summit and slope the strongest of the forts, completely commanding the harbor entrance in front. To the northeast, in the background, is another fort, the Castle of the Moors, while on either side of the city are more detached forts. Escombrera island off the entrance, the ancient Scombraria, or "place of mackerel fishing," makes a complete natural protective breakwater. There are probably 100,000 people in this Spanish naval stronghold of the Mediterranean.

MURCIA AND ALICANTE.

To the northward from Cartagena, the railway traverses the plain, and runs between the hills and

the extensive Mar Menor, gradually mounting the Sierra; and crossing it through the low Pass of San Pedro, the route goes over an elevated *despoblado.* This is a waste surface of hill, moor and saltmarsh, in which this region abounds, for we have come into Murcia, the province known as the *reino serenissimo,* one of the brightest, but at the same time, hottest districts of Spain. Its summer temperature will rise frequently to 110° or 120° Fahrenheit, while the winters are cold with severe frosts that destroy the young plants in early spring. Its scanty water supply and general barrenness are due to its south-eastern location, being swept by the parching sirocco coming across the Mediterranean from the Sahara. This wind, known locally as *Leveche,* is most stifling and enervating, covering everything with dust, and causing men and animals to sink exhausted. It makes the *calina,* or heat-haze, which in summer girdles the horizon, gradually extending over the firmament, and not disappearing until October. It also produces the treeless surfaces and these *despoblados,* which grow only saltwort and esparto grass, and cover most of the region. There are some fertile *vegas* in the valleys, maintained by irrigation, the chief being along the Segura, the only river of any size, which flows out from the Sierra Morena, or Brown Mountains of the interior, through this province to the sea. The chief occupations of the people are mining and the making of salt and

soda, a large part of the mountain districts being honeycombed with silver, lead, iron and other mines. So rich was the silver product in ancient times, that tradition tells how the Phœnicians, when their ships were full-laden, made their anchors of silver so as to carry more. The province has a large population of Moorish descent, and is styled the Spanish Bœotia, it being a native proverb that Adam on his return to earth found here his old home in unchanged condition — *el cielo y suelo es bueno, el entresuelo malo* —" while the sky and soil are good, all between is evil." Descending from the *despoblado,* the railway approaches the valley of the Segura, and turning westward reaches the city of Murcia, stretching broadly along the river, in a fertile, well cultivated and irrigated district.

The Iberians early made a settlement on the *Tader,* as the river was anciently called, flowing off toward the northeast through the beautiful and blooming *huerta* thirty miles to the sea. It grew, but was not known much in history until the Moorish era, they calling the river *Shekura,* whence comes its present name, and the town *Medinet Mursiya.* The Moors were conquered by Ferdinand III in 1243, and since then it has been Christian, while presenting a semi-oriental character, and it has gathered a population of over one hundred thousand. The city has a famous cathedral — Santa Maria — a Gothic structure begun in 1358 on the site of a mosque, its elaborate

tower rising four hundred and eighty feet, the summit giving a splendid view along the valley of the Segura and the guarding mountains to the northward, with the beautiful Fuensanta mountain and its convent to the south. This cathedral tower is the prominent landmark in all views of approach to the city. The cathedral façade is an attractive baroque work of the eighteenth century. The structure has a lofty Renaissance dome, and in the Capilla Mayor is a casket containing the heart of King Alfonso the Learned. There is a large gypsy settlement in the western suburbs, and the Segura, which falls over a dam and provides water power for some mills, is skirted by the Malecon or quay, which is the finest public promenade, though strangely lacking shade trees in a climate where the summer heat is known to rise to 120°. This quay has however its use, in protecting from river inundations a large expanse of lowlands where are orange groves, palms and gardens. Hot as are the Murcia summers, the winters however are not tempered as effectively as in the regions more nearly adjoining the sea. Being back in an environment of mountains, the winter mercury often falls below freezing, and the cold mistral or north wind is very piercing. Young plants have to be well protected against frost in the early spring and the fig and other trees seldom put forth leaves before late in March. Up the Segura towards the northwest, about twelve miles away, is

the Roman Ilorci, where the Scipios were defeated by Masinissa; and farther up, where the river breaks through the mountain ranges, are valuable sulphur mines, which were worked by the Romans and are now the property of the Spanish government. In this region are extensive plantations of esparto grass, the leaves being used for paper manufacture, ropes, matting and baskets.

Northeastward from Murcia, the railway into the sea coast kingdom of Valencia proceeds through the rich *huerta,* following down the Segura, which ultimately seeks the sea to the eastward. Below its mouth, and behind the Cape of Carvera, with an environment of salt lagoons, is the little seaport of Torrevieja. Alongside the Segura, on the edge of the *huerta,* rises the majestic Monte Agudo, which is reproduced in the Murcia *huerta's* heraldic emblem, a massive mountain of trap rock, thrust boldly up from the plain, and surmounted by a Moorish castle in ruins. There rises to the northwest of Murcia, with the Segura washing its base, the Sierra Orihuela, and spreading along the river bank about fourteen miles from Murcia, is the Moorish Oryul, now the Spanish Orihuela, where thirty thousand people get their living from the rich meadows, fields and gardens adjoining the river — the famous Segura *huerta,* of which the Spaniards say *llueva o no llueva, trigo a Orihuela* —" rain or no rain, there is wheat in Orihuela." On the hillside overlooking the town

is another ruined Moorish castle. The ancient Moorish town of Callosa is on the elevation beyond the Orihuela grain fields, and has many of its primitive dwellings built into the rocks likes caves. Beyond, from the northward, the rapid Vinalapó comes down out of the mountains, seeking the sea, but losing most of its waters, when the tide is up, in a lagoon, the Albufera de Elche, of fresh water. Here is the town of Elche, near the river above the lake, and one of the purest of the original Moorish settlements remaining in Spain, its narrow streets, white-washed, windowless dwellings, minarets, domes, palms, and even the faces of the people, recalling the Arabic ancestry, whose buildings and habits still survive. Its fame comes from the palm grove adjoining the town, irrigated by the Vinalapó waters, which are gathered in a *pantano* or reservoir, within the mountain gorge about three miles northward, and then led through a maze of canals to do the work of irrigation, continued to-day just as it was done by the Moors centuries ago.

This town was the Iberian Helike and the Roman Ilici, and here the Carthaginian Hamilcar met defeat at the hands of the sturdy inhabitants. It has a church of Santa Maria with a beautiful blue-tiled dome, and an elevated tower which visitors ascend to overlook the famous palm grove. In the latter are over a hundred thousand date palms, many being more than eighty feet high, planted in rows at in-

tervals of about six or seven feet, with running water all about and under them, and standing as the Arabs say, "their feet in water, their head in the fire of heaven." A tree will produce a crop of about seventy-five pounds of dates, bearing each alternate year, and ripening in the winter. The palm leaves are cut for Easter, made up into bundles which are blessed by the priests, and sent to the faithful throughout Spain, who fasten them to buildings as a sure preventive of damage by lightning. This palm grove extends a considerable distance eastward from Elche, and beyond it was the necropolis of the Ilici, who anciently peopled this district, that has yielded various antiquities. We have now come into the Kingdom of Valencia, and its southern province of Alicante, which stretches northward from the Segura. The whole of this region was originally under the sea, but the process of upheaval made it dry land, along the coast, with an inland border of rugged and weatherworn mountains, denuded of trees, and almost without water. A few streams emerge upon the plains, and their scant outflow is at once damned for irrigation, being gathered in the mountain gorges during the winter and spring, and saved for use in the parched summer and autumn. Thus by artificial means a desert is reclaimed, and exuberant crops in the valley *huertas* reward the industrious people.

The railway reaches the sea coast northeast of

Elche, and runs along it to the provincial capital of Alicante. Two protruding capes enclose a small bay opening toward the south, and here a harbor has been made by the aid of a couple of long moles, while on the northeastern verge, and dominating the city, is a high and rocky brown and almost bare hill, surmounted by the frowning Castle of Santa Barbara, at an elevation of over five hundred feet, and seen from afar. Its environment is a maze of walls, buildings and bastions, the slopes everywhere overgrown with cactus. It is an ancient fortification, and has a grand view over the town, stretching off from the base of the hill to the encircling mountains, and displaying the fertile lowlands and the Mediterranean coast, extending far away to the distant Cape Palos. The Iberians and the Romans both fortified this hill, the Roman settlement of Lucentum being a little to the north, while the Moors made their port of Lekant, down on the shore of the bay, where the city now is. There is a population of fifty thousand, and they export fruits, oil, liquorice, esparto grass and also the noted wines of Alicante, which are grown in neighboring vineyards and include the Fondellol, the heady Aloque and Moscatel. The harbor is fronted by the most attractive promenade, the Paseo de los Martires, which is an avenue of double rows of closely planted date palms. The chief church is dedicated to the patron saint of the province, San Nicholas de Bari, begun in 1616, but still unfinished.

There is a fertile district all about Alicante, thoroughly irrigated from the mountain streams, their waters gathered by capacious dams in the gorges. The chief of these is the Pantano de Tibi, in the gorge of the Cosco, a tributary of the Castella, which flows a short distance northward of Alicante. A wall sixty feet thick, and nearly one hundred and fifty feet high, built about two hundred and forty feet across the canyon, thoroughly intercepts the waters of the stream, which are doled out during the dry season, and taken by canals over to the *huerta*. Here are still seen the *compuertas*, or ancient Moorish sluice-gates. Near the sea, and about two miles to the northeast of Alicante, is the Convent of Santa Clara, which contains as a precious relic the Santa Faz, one of the three napkins which St. Veronica, at Jerusalem, used to wipe the Saviour's face before the Crucifixion, the others being in the Cathedral of Jaen and in Rome.

THE KINGDOM OF VALENCIA.

The district of Spain, stretching along the Mediterranean coast, northeastward from the Segura to the Ebro, is the most fertile and one of the most populous regions of the monarchy. It was united with Aragon in the thirteenth century, but was specially permitted to retain its ancient title of the "Kingdom of Valencia." It embraces the narrow littoral plains, between the Spanish central plateau

and the coast, through which a score of rivers of various calibres flow out of the hills to the sea. Nature made it almost a desert, by the influence of the prevalent dry winds coming over from Africa, that brought much heat with little moisture, but the industrious Moors, who long held it, dammed up the rivers at the outlets of the hill gorges, and by a complete system of irrigation, conveyed their waters through thousands of channels over the lowlands, making a veritable garden land which their successors have developed in the highest degree. The contrast, between the irrigated and non-irrigated surfaces, is that of the oasis and the desert, the former raising crops of exuberant fertility; and the necessities of the dense population, approximating two millions, have compelled the most rapid agricultural system, crops being raised, by successive rotations, several times a year, while the luxuriant alfalfa is made to rapidly grow, and yield a dozen to fifteen times in the twelvemonth. The strongest fertilizers are liberally applied; wheat sown in November is reaped in June; rice is then planted and inundated, being soon harvested, when the land is planted in grain, fodder, or root crops; and thus the rapid rotation goes on. The Arab originally said, what the Spanish proverb now repeats: "Valencia is a land of God; rice grows to-day where yesterday was corn." The *huertas* display expansive and monotonous fields of wheat in the spring, followed by vast plantations

of rice in the lower grounds, with diversified orange and palm groves, and apricot, mulberry and almond trees.

The country is dotted with towns and villages, and irrigation canals flow everywhere, though the Valencian prefers rain if it can be got, saying "the water of Heaven is the best irrigation." There are few rainy days in this region, and the rainfall averages but sixteen to nineteen inches in a year, the air being very dry and the winter-sky usually an unclouded blue. Much of the rain is in sudden and torrential downpours, that run away in destructive freshets. The four most noted exports of the district, other than cereals, are the *naranjas,* or famous Valencia oranges, the stemless Valencia raisins, the palms of Elche and the wines of Alicante. Its people, while descended from the original Iberians, the Greeks, Carthaginians and Romans, who successively held the country, are also largely Moorish, and to this ancestry they owe their agricultural skill and industry. The Moors held it practically from the early eighth century, until the conquest by the King of Aragon in 1238, excepting a brief tenure by the Cid, at the end of the eleventh century. When united with Aragon, the kingdom had a population mostly of full-blooded Moors, with a mixed race of the *Mozarabs,* who were Christians that had adopted the Arab customs and languages, and for use in their churches had to have the Bible translated into Arabic.

In the later years, many of the Moors nominally became Christians, but in the terrible persecutions of the early seventeenth century fully two hundred thousand of these *Moriscoes* were sent into exile.

Northeastward from Alicante, the mountainous region, out of which the little streams flow down that furnish the water supplies, is projected far into the sea, in the double capes of Nao or St. Martin and San Antonio. The rocky strata extend under the Mediterranean as a submarine ridge still farther northeastward, reappearing in the isles of Ibiza and Formentera of the Pityuse archipelago, and beyond them in the extensive group of the Balearic islands. Over the Sierra, to the northward of Alicante, is the factory town of Alcoy, on the hillside overlooking the Alcoy vale, a fertile region, for which this group of mills makes woolen fabrics, paper for cigarettes and some iron manufactures. Farther down the valley is ancient Concentaina, still surrounded by old Roman walls which the Moors rebuilt, and having the interesting tower-surmounted Palace of the Duke of Medinaceli. Out on the sea-front of the Sierras, is the noble and almost isolated Monte Mongo, rising 2,500 feet, at first by gentle ascent from the west toward the east, the huge mass of limestone then falling off abruptly to the sea, this termination being Cape San Antonio with its lighthouse. On the top there is a building in ruins, where Arago and his companions made various scientific observations at

the beginning of the nineteenth century. A superb view is had from the summit, over the extensive inland mountain ranges that run parallel with the coast, and across the blue sea to the distant Balearic islands.

Deep down at the northern base of this mountain, flows the little Vergel river, its waters mostly drawn off for irrigation, and on the hill slopes all around are raised the fruitful Valencia raisins. Here is Denia, the port whence these raisins are shipped to America and England. This is one of the most ancient settlements of the Valencian coast, the Grecian Hemeroskopeion, founded upon an earlier Iberian settlement, said to have been originally colonized by the Phœnicians. When the Romans came they called it Dianium, and built their castle on top of the hill, around which the town now clusters on the slopes. There are remains of the Roman and Moorish town walls, and also, on the hillside, a remnant of the Temple of Diana said to have been built in imitation of that at Ephesus. The Romans made it a naval station, and the Moors held it afterward, when it was a most prosperous city with fifty thousand people. It was captured by the Christians in the thirteenth century, but the harbor afterward silted up with sand, restricting trade, and the expulsion of the Moriscoes also gave a serious setback. It suffered many sieges, the last and one of the most famous, being the brave defence by the

French garrison in 1813, where they held the castle, now in ruins on the hilltop, during five months of almost incessant bombardment, until, reduced to about one hundred almost starved survivors, they capitulated with all the honors of war, and were allowed to go in freedom. Its houses are Moorish, their flat tops and whitewash being picturesque among the green foliage of the hill slopes, while the outlook everywhere displays fascinating views.

About fifteen miles to the northwest, the river Alcoy flows into the sea, with the little harbor of El Crao at its mouth, the port for Gandia, which is about two miles up the stream. In Valencia, famous for the fertility of its well-irrigated river valleys, this vale of the Alcoy is noted as the richest and most populous *huerta,* and Gandia is its chief town. High above rise the striking peaks of the Monduve, elevated 2,800 feet. In the early times this place gave the title to the Dukes of Gandia, and their former palace is one of its show places. These Dukes were of the family of Borgia, who lived here and at Jativa, among the hills to the westward, an Iberian town which became the Roman Saetabis, and then made linens, which elicited the warm praises of Pliny, when he visited Hispania. The Borgias originated at the town of Borja, where their ancestral castle still exists, among the desolate mountains adjoining the Ebro, some distance above Saragossa. They came down to Jativa and Gandia, a more

prosperous region, acquired wealth and power, entered the church, and gave it two popes, in the fifteenth century, Alfonso Borgia, who was Pope Calixtus III, and Rodrigo Borgia, Pope Alexander VI. The latter had the notorious Cæsar Borgia for his natural son, and Lucretia Borgia for his natural daughter. Another son of Pope Alexander, Juan Borgia, who was Duke of Gandia, had for his son San Francisco de Borgia, who became head of the Jesuit order in the sixteenth century. Cæsar Borgia being expelled from Rome in 1504, went to Naples, but the "Gran Capitan" Gonsalvo of Cordova, acting for King Ferdinand, sent him a prisoner to the Castle of Jativa. He escaped to France two years later, taking refuge with the King of Navarre, and was slain in battle in 1507.

To the northward, the river Jucar, the most considerable stream in this region, the Sucro of the Romans, flows out to the sea, through a pleasant and well tilled intervale, with many orange and palm groves, and an extensive surface of rice swamps. High above rises the Sierra de Cullera, having on top a conspicuous chapel of the Virgin, and the ruins of a castle. Just beyond the mouth of the Jucar, is the most extensive lake in Spain, the Albufera of Valencia, extending about ten miles just at the edge of the sea, from which it is divided by the narrow strip of land, formed of pine-covered sand dunes nowhere over twenty feet high, which is called the

Dehesa. This lake has, on the inner side, a curving shore stretching about eighteen miles, and its name comes from the Arabic *Al-buhera,* meaning a "lagoon." The waters have long been fresh, but this is said to be the last relic of the sea which originally covered the coastal plain of Valencia. Reed-banks and rice fields adjoin the lake, and it is connected by a canal with the sea, the waters having numerous fish and waterfowl. In 1812, Napoleon gave this lake to Marshal Suchet, who captured the Valencian shore for France, at the same time making him the Duc de Albufera. It is Spanish government property, but leased to a company that pumps the waters from various stations, mainly to irrigate the adjoining rice fields.

The Arab *Wad-al-abyad,* or the "White river," so called from the color of the detritus it brought down from the mountains, is now the Guadalaviar river, popularly shortened into the Turia, and it comes from the northwestward to the sea, through the fertile *huerta* of Valencia. Here is the great city of the Valencian kingdom, about two miles from the coast, which has over two hundred thousand population and a large commerce, conducted from its harbor at the river's mouth, the Grao, thus named from the Latin *Gradus,* or the "step" to the sea. This harbor, on the northern side of the river, is sheltered by two large breakwaters, and is divided into an outer and an inner basin. Six thousand

vessels will call here annually, the chief exports being rice, oranges, raisins and wine, but the foreign trade is lessening through the competition of other ports. The city spreads broadly upon the Southern river bank (the bed being usually dry) the brilliant tiled domes of its churches, in blue, gold and white, rising above the mass of houses in its narrow busy streets, adding to the oriental appearance, while over all is the deep blue sky of sunny Spain. The Moors were very proud of Valencia, calling it *Medenat-al-turat* the "city of the fertile soil," and in their florid style had an ancient proverb, which translated means, "one would take it for a piece of heaven upon earth." Its climate is mild and very dry, most of the winds bringing heat without moisture, and only the east wind, coming along the axis of the Mediterranean, providing rain. Its great festival day is April 5th, the day upon which its patron saint was baptized, St. Vincent, born in 1419 in a house that is still preserved as a chapel, the martyred saint being canonized in 1455. It was a Roman settlement, taken and destroyed in the wars between Sertorius and Pompey, but rebuilt by Augustus, though there are only sparse remains of Roman walls and gates. The Moors made its greatest prosperity, and it was the capital of their Valencian kingdom, which extended along the Mediterranean from Almeria to the Ebro. Valencia was taken by the Cid in 1095, but after his death the

Moors recovered it, and it was not finally secured by the Christians until 1238, when Jaime I of Aragon took possession. Suchet captured it for the French in 1812, his reward from Napoleon being the Albufera Lake and Dukedom, but the English took it the next year. The first printing press in Spain is said to have been used in Valencia in 1474, and its chief recent event was the signing by Queen Christina of her abdication of the Spanish throne, in October, 1840. The ancient city walls erected by the Moors were removed in 1871, and replaced by fine boulevards, two of the old gates, however, being preserved. The oldest is the North Gate, near a bridge crossing the river, for the northern road, to Sagunto, the Torres de Serranos, two massive towers flanking a central structure in Gothic, and resting on Roman foundations. It is now a city prison and has been well restored. This was built in the fourteenth century, and the other old gate, erected about one hundred years later, is the West Gate, the Torres de Cuarte, also a prison, a massive double-towered structure.

The older town, with its narrow and irregular streets, has the cathedral for its centre, this being the most famous structure in Valencia, *La Seo* the name derived from the Latin *sedes,* "a seat," and dedicated to the Virgin. Upon its site originally stood the temple of Diana, which was followed in the later Roman time by a Christian church, and

then upon the Moorish conquest by a mosque. After the capture of the city by the King of Aragon, the cathedral was designed, the foundation laid in 1262, and it was over two centuries building. The interior is three hundred and twenty feet long and two hundred feet wide across the transept, there being a nave and aisles and a pentagonal capilla mayor, with radiating chapels, and an impressive Gothic bell-tower of the fourteenth century, adjoining the main façade, this being called *El Miguelete*. The name comes from the bell, first hung on the feast of St. Michael, to commemorate the entry of Jaime I into the city, which was on September 28, 1238, St. Michael's eve. This bell is solemnly struck by a hammer on the outside, and the bell-strokes are the signals regulating the sluices that control the flow of water in irrigating the *huerta*. The tower is eight sided and about one hundred and fifty feet in circumference, while its height is one hundred and fifty-two feet, the original intention having been to build much higher. There is a view from the top, over the flat-roofed houses and beautiful tiled domes of the cathedral and other structures, the deep and narrow streets looking like canyons in the ground. The two old city gates and other towers are also in full view; while a wide expanse of the neighboring country is disclosed almost all around stretching over the fertile *huerta* and its mountain environment, northward to the distant castle-hill of Sagunto,

and far across the wide and placid waters of the Albufera southward, to the isolated Monte Mongo. The tradition is that when the Cid entered Valencia, he took his wife to the top of the Moorish minaret of the mosque that stood here, to proudly show her the paradise he had won. There are attractive paintings in the cathedral, and among its precious relics are the Staff of St. Augustine, the ivory Crucifix of St. Francis de Sales, and upon a pillar near the high altar hangs the Armor of King Jaime I of Aragon, its founder.

Adjoining the cathedral is the *Plaza de la Seo,* with a tasteful fountain and a pleasant garden. In this Plaza is a semicircular divan, whereon assembles the most venerable judicial institution of the province, the court known as the *Tribunal de Aguas,* or the "Water Tribunal." This organization was created during the Moorish era, and is retained in its original simplicity and honest methods, exercising full control over all the irrigation districts, and hearing cases every Thursday by verbal procedure. The decision is made as soon as the litigants and witnesses testify, and the judgment is summary, there being no appeal, and the condemned suitor receiving no water for his field until he satisfies the judgment. Peasant proprietors, selected from each district, compose the court. Fronting the Plaza is the imposing Audiencia, which was formerly the Chamber of Deputies for the Kingdom of Valencia.

Their Assembly Hall is a splendid apartment, with many portraits of old dignitaries, including works by Zarinena and Peralta. The Valencian school of art flourished here from the fourteenth to the seventeenth centuries, and many of their pictures, gathered chiefly from suppressed convents, are displayed in the Provincial Museum, which occupies the building of a former convent. Here are works by Ribalta, Espinosa, Zarinena, Peralta, Velasquez, Ribera and others, the great artist of this school being José Ribera, known popularly as Spagnoletto, who was born at Jativa in 1588, and died in Naples, 1656. He was a pupil of Coravaggio, whose style he followed, excelling in gloomy subjects and chiaroscuro. Francesco Ribalta was born at Castellon in 1552 and lived until 1628, and he introduced the Italian manner into the Valencian school. Ribera was his pupil before going to Italy and he also taught Espinosa, who was born in 1600 and lived until 1680. The Museum contains a noble collection of over fifteen hundred paintings, mostly by these older Valencian masters and their pupils.

There are other paintings by Ribalta in the cathedral, and the spacious Colegio del Patriarca, a Renaissance structure which was built in the late sixteenth century by Juan de Ribera, then the Archbishop and Viceroy of Valencia. Part of this structure is the Church of Corpus Christi, its dome decorated with frescoes representing the life of St.

Vincent, while a chapel contains Ribalta's painting of the appearance of Christ and the Saints to St. Vincent on his sick-bed. Every Friday morning, in this church, the *Miserere* is celebrated, and ladies cannot attend unless dressed in mourning and wearing a mantilla. Ribalta's painting of the Last Supper, alongside the altar, is then lowered by machinery, and its place taken by curtains in successive colors, the last black one, when removed, disclosing the dying Saviour on the cross. The Valencian University is opposite the Colegio, and is a fifteenth century foundation, which instructs about two thousand students and has a large library, especially rich in the romances of chivalry. The city front on the northern river bank is mostly occupied by the Alameda, the fashionable tree-lined driveway and promenade. On the southern side, in the Plaza de Tetuan, is the old citadel, which Charles V built to resist the incursions of the Barbarossa pirates, but the French in their attack in 1812, destroyed most of the structure. There remain a gateway and tower, with other spacious buildings, which are now artillery barracks and an arsenal, and include the Captain General's residence. The charming pleasure ground of the Glorieta adjoins the Plaza de Tetuan, this being the site of old fortifications, while at the outer verge is the spacious government tobacco factory, employing four thousand persons, nearly all women, who are expert in making cigars.

The finest public square is the Plaza del Mercado, where the picturesquely costumed peasantry attend the morning markets. Here were held for centuries, the public festivals and tournaments, and the tradition is that the Cid buried alive the luckless pasha Ahmed in this square, when he captured the town, because the pasha would not reveal the spot where the Moorish king Yahya had buried his treasures. The Alcazar faced its northern side, and here lived the Cid's wife Ximena. Its site is now occupied by the fine Gothic Lonja de la Seda, the Silk Exchange, a construction of the late fifteenth century, recently restored. The façade is nearly one hundred and eighty feet long, with a central tower. One wing is a museum of antiquities, and the other is the Exchange Hall, the richly vaulted ceiling borne by rows of pillars looking like palms, while around the upper part of the walls, runs a Latin inscription reciting that the house was fifteen years building, and that the merchant who neither cheats nor takes usury will inherit eternal life. In the Valencian suburbs are the factories of Manises, making the beautiful square glazed and brilliantly colored tiles, called azulejos, so extensively used in adorning the buildings; and also the Nella Mosaic factory at Meliana. At Burjasot northwest of the city are the famous Moorish Mazmorras which are silos used as receptacles for keeping grain. There are forty-one of these underground vaults, built like huge jars and

lined with stone, their roof, made of blue and black flagstones, being a popular promenade for the locality, which now is a picnic ground.

APPROACHING THE EBRO.

Northward from Valencia, the railway crosses the fertile *huerta,* and with the sea on the right hand, the train soon comes into full view of the castle-crowned hill of ancient Sagunto, eighteen miles away. The little river Palancia rushes from the mountains out to the sea, in the springtime, but its waters at other seasons are drained off for irrigation. A mountain spur is thrust across the Valencian plain south of the river, its precipitous sides rising nearly six hundred feet. On the top is the castle, while at the northern base along the river is the little town. It was one of the earliest Iberian settlements on this shore, the Greeks coming and mingling with the original inhabitants, and the youthful Hannibal essaying to take it, 219 B. C., so as to restrain the progress of the Romans who approached from the northward, he desiring to make it a Carthaginian stronghold. The attack he made upon the castle-crowned hill, was one of the famous sieges of ancient times. The besiegers used battering rams, but were repeatedly driven off and Hannibal was wounded. The walls were breached, but the Carthaginians, after a battle in the streets, were driven out, and a new wall built. This too was breached, when they built a second, and

a third, and finally a fourth wall, across the narrow ridge, which gave the only practicable approach to the hilltop from the western side. But the defenders gradually perished in these combats, and finally, a handful only being left, Hannibal, after eight months' siege, entered and burnt the city, most of the remaining garrison suffering a voluntary death in the flames. This protracted siege began the second Punic War, and 214 B. C. the Romans joining the Iberians took the fort, and it was rebuilt, being known as Saguntum. They also constructed a circus, theatre, and temples, but the town was never as important afterward. When the Moors got possession they held it until driven out by the Cid, and it was then called Murbiter, from the Latin *muri veteres,* meaning "old walls," and afterward became Murviedro, until recently the official name was changed to Sagunto. In the later centuries, the remains of the Roman buildings were used chiefly as a quarry for modern constructions, so that an Aragonese poet in the seventeenth century wrote about it indignant lines, which translated read that "with marbles bearing dignified inscriptions, formerly the theatre and altars, they now build in Saguntum taverns and pot-houses" — (*tabernas y mesones*).

The ancient Roman circus site, alongside the river, is covered by gardens. It was about fifteen hundred feet long and there are some remains, including traces, at the western end, of a bridge. The theatre

to the southward, about half-way up the hill, is the best preserved antique of Sagunto. The semicircular auditorium, largely hewn out of the rocky hillside, was about one hundred and sixty-five feet in diameter and could seat eight thousand spectators. Behind and above the theatre, on the long ridgy summit of the hill, is the castle, covering two heights with a depression between. The foundations are Roman, but most of the present construction is Moorish. On the western height, the tower of San Pedro defends the southern and southwestern slopes, and the approach along the ridge from the west, was the direction whence Hannibal made his attacks. The summit is higher, and here is the main work, the Castle of San Fernando, the top being called the Palo de la Bandera or the "Flagstaff." There is a spacious Moorish cistern, and in the castle walls are built ancient sculptures and inscriptions, evidently taken from earlier works. Upon the eastern height are the ruins of the old citadel of Saloquia, with the remains of a Roman Temple. To the southward the precipice falls suddenly off into an abyss clad with cactus, while the view over land and sea is superb, embracing the wide plain of Valencia, from the distant Mongo and mountains of Alicante far southward, around to the hills of Benicasion, nearly forty miles to the north, and the valley of the Palancia stretches a delicious green paradise to the northwest. This broad and beautiful intervale extends away among the hills,

beyond the boundaries of Valencia, until lost in the bleak and barren steppes of Aragon. About twenty miles up the river, surrounded by mountains, is ancient Segorbe, which was the Celtiberian Segobriga, according to traditions that tell of the Roman and Carthaginian struggles there. At Segorbe is a palace of the Duke of Medinaceli, with Doric columns of the Roman period, while one of the churches contains Ribalta's painting of *Christ in Hades.*

To the northward of the wide Palancia valley, the surface rises into hills forming the northern boundary of the great Valencia province. This is the hill district of Almenara, and on a high eminence west of the railway is the old Moorish castle holding the pass, where King Jaime I of Aragon defeated them in 1238, and thus was enabled to overrun and capture the rich Valencian towns and *huertas.* Beyond these hills, the Mijares torrent comes out of the mountains to the northwest, its waters diverted through a maze of canals for the irrigation of the fertile *huerta* of the Villareal. The chief of these works is the Moorish Castellon Canal, which is as good to-day as when built, probably a thousand years ago. The town of Villareal is environed by orange groves, among which its blue tiled cupolas and towers prettily rise. We are in the province of Castellon de la Plena, and upon another pleasant *huerta,* three miles northward, is its capital, Castellon, about four miles inland from the sea coast, the birthplace of the artist Ribalta.

Prosperous hamlets are scattered liberally along the coastal plain, despite the fact that the mountains here come closer to the sea, but the wonderful stimulant of the irrigation systems from the numerous streams, makes a fertility that keeps the dense population busy. On a high, rocky islet just off the coast, and connected by a narrow sand strip, is the stronghold of Peniscola, called the "Gibraltar of Valencia," which Jaime I, after a vigorous siege, took from the Moors in 1233, paving the way to his conquest of Valencia. He gave the islet to the Knights Templar, and it afterward passed into the possession of the Order of Montesa, founded in 1318 to succeed them, and named for the old castle on the river Montesa, now Jativa, which was ruined by the earthquake of 1748. When this Montesa order became extinct in the fifteenth century, Peniscola was made crown property, and it was captured by the French in 1811. This was the place of refuge of Pope Benedict XIII in 1415, when the Council of Constance dethroned him. The little summer-dry river Cenia is crossed, the boundary of the old kingdom of Valencia, and the train enters Catalonia, the northeastern province of Spain, extending to the Pyrenees. Westward, among the mountains, is the fortress of Morella, the Roman Castra Ælia, which was the stronghold protecting the Valencian frontier against Aragon, but fell into the hands of Jaime I, with the rest of the coveted Moorish kingdom, in the

thirteenth century. It displays ancient castle towers and a church of Santa Maria, built in 1317, with a choir elevated upon arches to which the clergy ascend on a winding staircase, and in it is Ribalta's painting representing the conquering Jaime I, holding in his hand a piece of the True Cross. The first Catalonian town entered is Uldecona, and in this district the irrigation method is varied by the appearance of norias, or wheels that raise the waters. Far away to the east, the flat land spreads out to the distant Cape Tortosa, at the delta of the great river, while the lofty Sierras continue to bound the western view. Then the route comes to the huge Monte Caro, rising nearly three thousand feet, and we reach the valley of the Ebro at Tortosa.

TORTOSA TO SARAGOSSA.

The river Ebro is one of the greatest in Spain, and its tributaries collect the waters of the larger portion of the southern slopes of the Pyrenees. Its head springs are in the mountains of Santander on the northern border, and it flows southeast between lofty and picturesque Sierras, separating Navarra from Old Castile, intersects Aragon, and after a course of about four hundred miles, empties into the Mediterranean through a double mouth, eastward of Tortosa in Catalonia. The huge mountain chain forming the western border of the province, and dividing it from Aragon, is broken down for the river passage at

Mequinenza, making a romantic defile, and the geologists tell us this mountain range was formerly a barrier, damming up the waters in a vast lake that covered most of Aragon. Above the defile, it receives the most considerable tributary from the northward, the Segre, coming down from the eastern Pyrenees. Farther up, it has the inflow from the north of the Gallego near Saragossa, and the Aragon which named that kingdom, and also the Guadaloupe, Jalon and Oca coming in from the south. Like all Spanish rivers, the Ebro abounds with shoals and rapids, impeding navigation, but a canal from below Saragossa to Tudela in Navarra, aids the passage of boats to the upper waters. The lower river has been improved below Tortosa, and the coast harbor of Alfaques or the "sand banks," is made south of the delta, behind a protecting peninsula, to which the San Carlos Canal leads. The chief commerce of the Ebro is the floating down of timber from the mountain forests, and the transport of grain. This noted river was anciently the border, between the Moorish possessions and the Christian empire of Charlemagne. Its delta is covered with many canals and ponds, and through it the two mouths flow to the sea, the *Gola del Norte* and the *Gola del Sur,* enclosing the sandy island of Buda. At the northern mouth is the lofty lighthouse of Cape Tortosa, seen far over the sea and the lowlands.

In the fertile valley of this great river, about

twenty miles from its mouth, is Tortosa, just where the stream emerges from the hill country to the broad coastal plain. This place was regarded as the key to the control of the Ebro, and was early made a Roman stronghold as Dertosa, while afterward it was long fought for by Christian and Moor. Charlemagne's son Louis captured it, but the Moors regained possession in 811, and it then became a piratical headquarters preying upon the Mediterranean commerce, so that Pope Eugenius proclaimed a special crusade against the place, and it was attacked by the allied Knights Templar, the Genoese and others from Italy, and captured in 1148, coming under control of Ramon Berenguer IV of Barcelona. The next year the Moors made a ferocious attack, but were beaten off by the help of the women, so that in gratitude Ramon gave them the investiture of the red sash of the order *La Hacha* "the axe," authorizing them to take precedence of the men at marriages, and to import their wedding *trousseau* free of duty. There are various Moorish remains, including the Almudena or tower of the Cathedral, the sacred edifice built in the fourteenth century, being on the site of Abderrahman's mosque of the tenth century. Tortosa is peaceful now, and the ruins of the grim old castle overlook the town from the hill slopes. The Ebro comes from the northward to Tortosa, breaking through the mountains that divide Catalonia

from Aragon, and flowing in deep ravines along the Sierra de Mequinenza, where it receives its chief affluent, the Segre. Above their union, it comes from the west, and at Caspe receives the Guadaloupe from the southward. On this stream is Alcaniz, which was the Iberian Anitorgis, where Hasdrubal the Carthaginian, 212 B. C., defeated the Romans, killing the two generals, the brothers Gnæus and Publius Cornelius Scipio, the earliest of that illustrious family. The Ebro, above Caspe, flows through a broad and fertile intervale from the northwest. At Fuentes de Ebro, the Ginél comes in, and here is the Canal Imperial of Aragon terminus. This canal was started by Charles V in the sixteenth century, but never finished, and it follows the right bank of the river for about sixty miles, being ten feet deep. Originally intended for commerce, it has been long superseded by the railways and is now used for irrigation, bringing down an enormous volume of water from the higher river reaches, which makes great fertility on that side of the river. It is constructed on a very uneven surface, and has various waterfalls to lower levels, while in places it is very much higher than the Ebro, passing through Saragossa along the southern hill slope at an elevation of one hundred and twenty feet over the river level. Eighteen miles above the canal terminus is Saragossa, the Spanish Zoragoza, the

capital of Aragon, with about a hundred thousand population, and the dominant city of the Ebro valley.

St. James the Elder, the son of Zebedee, is the patron saint of Spain; the tradition being that he came here as a missionary. Santiago de Compostela, in the northwestern part of the kingdom, claims possession of his bones. The tradition adds that after he was beheaded in Judea, his remains were brought to Spain, but their whereabouts forgotten, till in the ninth century, a brilliant star pointed out the spot on the site of the present Santiago Cathedral. All through the long wars of the Christians against the Moors, the faithful frequently saw their patron saint, clad in gleaming armor, encouraging and helping in the battles against the infidels. While Santiago is his shrine, Saragossa has a memory and a relic fully as attractive to the devout. When engaged in his Spanish missionary work, the Virgin here appeared to St. James, standing on a sacred pillar. The day was October 12, still kept as the sacred day of Saragossa, and the revered pillar is in the Cathedral of the Virgin del Pilar, a relic that brings crowds of pilgrims to the city. Many have been the marvels and miracles surrounding the Spanish memory of St. James, and in 1595 the "Gospel of St. James" was discovered upon a mountain of the Sierra Nevada range, inscribed upon lead. For nearly a century this relic attracted the liveliest at-

Street in Saragossa.

tention of the church, but in 1692, after exhaustive investigations, Pope Innocent XI declared the leaden gospel to be spurious.

Aragon is a somewhat desolate region, its stony wastes, (debarred of moisture by the coast mountains keeping out the rain-bearing winds), being in sharp contrast with the fertility of the eastern districts of Catalonia and Valencia along the sea, and the rich oasis of the Ebro which extends through the desert steppes. In the usually thirsty acres of Aragon, it was a proverb, that the people could more easily mix their mortar with wine than with water, so few and scant are the streams. The Aragonese are a sombre people, reproducing many of the traits of their remote Iberian ancestors, and being passionately devoted to the memory of the Virgin del Pilar. Her image is in every home, and it hangs as a jewel upon almost everyone's neck. She is the protector of the whole kingdom, and especially of Saragossa. This city was the original Iberian settlement of Salduba, at the crossing of the Ebro, where the Romans early took possession, as it controlled not only that river, but also the Gallego coming from the north, and the Huerva and Jalon from the south. Augustus made here the Roman *Colonia Cæsar Auguste* from which was derived the city's name, and there are some relics of the Roman walls yet preserved. Charlemagne tried unsuccessfully to take it from the Moors, and being compelled to raise the siege in 778, his

forces retreated northward and through the Pyrenees, where their rear guard was cut off in the Pass of Roncesvalles, and the famous Roland, the Paladin, was slain. After a long siege in 1118, however, Alfonso I of Aragon took the city from the Moors, and it became his capital. For over three centuries it was very prosperous, but on the marriage of Ferdinand of Aragon to Isabella, and the subsequent removal of the capital to Castile, the queen's kingdom, its importance declined.

The great event of Saragossa is the sieges by the French in 1808–9. It was practically an unfortified town when the people determined to oppose the French invasion, and on May 25, 1808, organized for resistance under their own leaders, who had less than three hundred soldiers. Hastily erecting defences, the French attacked them in June, and after a siege from June 15 to August 14 were repulsed with great loss. The French returned and began a second siege with about eighteen thousand men, December 20, which continued until February 21, 1809, the besiegers being largely reinforced, when the town surrendered after one of the most desperate defences in history, yielding to famine and pestilence, after baffling four marshals of France at the head of great armies. The French held the place until July, 1813. During these sieges, fifty-four thousand persons within the town perished, of whom only about six thousand were killed by the enemy, the others dying

from starvation and epidemics. The French, about the beginning of December, penetrated the lines of defence, but they had to capture every house separately, and the desperate street fighting continued during three weeks before they could compel a surrender. The French said of the stout defenders that "their heads were hard enough to drive a nail," and in this fighting was first heard the phrase, *guerra la cuohillo* —"war to the knife." The heroine of the siege was the famous "Maid of Saragossa." In the line of the old walls, on the western verge of the city, is the Puerta del Portillo, to which leads from the central district, the street of Agustina Aragon. The famous maid was Maria Agustina, an itinerant seller of cool drinks in the streets, and during the siege she distinguished herself by heroic participation in some of the severest encounters with the French, and particularly in the final street fights. Her lover was an artillerist, working his gun at this Puerta, and when he was shot down, she took the match from his dying hand, and worked the gun herself. This gave her the popular title, "La artillera," and her fame went throughout the world. For her services she was made a sub-lieutenant in the Spanish army and received many decorations. The Maid lived until June, 1857. Byron has immortalized her in *Childe Harold:*

Her lover sinks — she sheds no ill-timed tear;
Her chief is slain — she fills his fatal post;

Her fellows flee — she checks their base career;
The foe retires — she heads the sallying host.
Who can appease like her a lover's ghost?
Who can avenge so well a leader's fall?
What maid retrieve when man's flash'd hope is lost?
Who hang so fiercely on the flying Gaul
Foiled by a woman's hand, before a battered wall?

The centenary of the siege of Saragossa was appropriately celebrated, in the latter part of October, 1908, by a fete and the erection of a monument to the brave and obstinate Aragonese, the King and Queen of Spain, Alfonso and Victoria, attending. There was also a historical congress, all the nations engaged in the Peninsular War and the sieges being represented, including the French.

Despite the usual barrenness of the Aragon wastes, the immediate neighborhood of Saragossa is fertile, being the lowland plain bordering the Ebro and its affluents, and the Imperial Canal. Mountains surround these intervales, and at the northern horizon is the snow-crowned line of summits of the Pyrenees. Water courses run everywhere through the fields, and the fertility in the spring, when the grain is in full growth, is charming. The suburbs are filled with pleasant villas, while the Imperial Canal, constructed along the southern highlands bordering the city, furnishes water power for many factories. The central older town, with its fortress-like dwellings of the ancient aristocracy, known as the *solares,* continues

substantially unchanged, but the city has spread over a large surface of new and modern streets that are very attractive. Several bridges cross the Ebro, which is bordered by broad quays. The oldest of these bridges dates from the fifteenth century, and crosses in front of the Town Hall and the Lonja, or Exchange, the latter a fine Renaissance structure of the middle sixteenth century, having a great hall occupying most of the interior. On either side of the public buildings are the two cathedrals, which are the most notable structures. To the eastward is the venerable Gothic cathedral dedicated to the Saviour, and built between the twelfth and sixteenth centuries, *La Seo,* the seat of the archbishop, a large quadrangular edifice, with an octagonal four-storied tower. The construction has developments of Moorish style, and the interior with its double aisles and rectangular choir, appears much like a mosque, there being slender clustered pillars, with elaborately sculptured capitals and richly adorned vaulting. In the midst of the choir is a tabernacle, having black and white twisted columns, and placed to mark the spot where tradition says the "Cristo de la Seo" addressed one of the canons. There are statues of St. Lawrence and St. Vincent, and here King Ferdinand, the Catholic, the conqueror of Granada, was baptized in 1456. The noted Spanish inquisitor, Pedro Arbues, was murdered in this cathedral in 1485, and is buried

with other prelates in one of the chapels. He was afterward made a saint, and his kneeling figure is reproduced on the monument.

The famous cathedral of the Virgin del Pilar is west of the Town Hall and near the river, above which rise its brilliantly colored tiled cupolas and domes. The sacred pillar, on which the Virgin appeared to St. James, stood here, not far from the river, and in early times was enclosed by a small chapel, which afterward was surrounded by other chapels and cloisters. In the late seventeenth century the present cathedral was begun, and work was continued until the nineteenth century, some of the towers being yet unfinished. It is about four hundred and forty feet long and two hundred and twenty feet wide, being in fact two churches with their high altars standing back to back. Chapels are all around the interior, which in the rather larger western portion is the cathedral, with nave, choir and altar; and to the eastward is the other church, its high altar being in the Chapel of the Virgin at the western end. Rows of columns divide the aisles from the naves, while above the aisles are tiled cupolas. The central dome rises over the cathedral high altar, and the Virgin's chapel is surmounted by a still larger dome. The cathedral altar is a splendid Gothic work in alabaster, from the quarries of Escatron, down the Ebro, and is adorned elaborately with scenes from the Virgin's life. At the top angels support her, and

Cathedral of Our Lady of the Pillar, Saragossa.

below are statues of St. James and St. Braulio, the devout pilgrims' kisses having partly worn away their hands. The chief attraction is the Chapel of the Virgin, which is rectangular, and surmounted by an oval dome, borne on marble columns. Above is a higher cupola adorned with frescoes by Velasquez. In the western wall are three recesses, with altars lighted by silver lamps, and here masses are said during all the mornings. Above the central and left-hand altars are marble groups, one being the Virgin with angels, and the other St. James and his disciples. Above the right-hand altar is the prized, but almost invisible, Pilar, and a wooden image of the Virgin and child, blackened by incense. Behind the wall is an aperture, through which the pilgrims may kiss the Pilar, contained within. Upon October 21, 1905, there was presented to the Virgin del Pilar a magnificent set of crown jewels, ordered by Queen Maria Christina of Spain and a Committee of Ladies, in testimony of the veneration in which the Virgin is held throughout the kingdom. There is a crown and corona for the Virgin, and a smaller crown for the child. There are ten thousand diamonds, pearls, emeralds, sapphires, and other precious stones in this national offering which cost $150,000. It was exhibited at the royal palace of the Escurial, also in Madrid, and was taken to Rome by a deputation of the ladies, to be blessed by the Pope, before the presentation at Saragossa.

Southward some distance from the cathedral, and in the heart of the city, is the old Church of Santiago, which was built at the place where St. James, according to the tradition, passed the night after the Virgin's appearance to him, in vigil and prayer for the success of his mission work. Another pious tradition of the Ebro, relates to the martyrdom of Saints Celedonius and Emeterius. About seventy-five miles up the river is the ancient Iberian town of Calahorra, where the Romans beheaded these saints in the third century, throwing their heads in the Ebro. They floated past Saragossa down to the Mediterranean, and all around the Spanish peninsula, to Santander on the coast of the Bay of Biscay, where they were cast ashore and thus became the patron saints of that noted Spanish watering place, the high altar of the Santander Cathedral enshrining these precious relics.

TARRAGONA.

We have entered Catalonia in the region of the lower Ebro, the famous Roman province of Hispania Torraconensis, which became part of the kingdom of the Franks, as the land of the "Spanish Mark," until Wilfred the Shaggy in the ninth century established its independence. It got its code of laws from Ramon Berenguer I of Barcelona in the eleventh century, and afterward was united with Aragon. The Catalan is regarded as the best business man in Spain, and in the middle ages he was among the boldest and

most skilful mariners of Europe. It is a mountainous district, with the lower coastal regions, along the Mediterranean, made extremely fertile by irrigation. Northward of the wide Ebro delta, the mountains draw near the coast. The promontory of the massive Cape Salóu projects into the sea, surmounted by a watch-tower, while beyond is the harbor of Tarragona, a stronghold of the Iberians, and one of the most interesting survivals of the ancient times. A mole, nearly a mile long, shelters the harbor from the sea, while the hill formerly crowned by the citadel, and now by the cathedral, rises over five hundred feet above the town, which is built upon its slopes and along the water's edge. This mole, having a lighthouse at the end, was originally constructed in the fifteenth century, largely of stones taken from the old Roman theatre, and has since been extended. It is the chief promenade of the townsfolk. The city now has a population of about thirty thousand, but in the days of its prosperity, as the chief Roman stronghold of Hispania, the report is that it had a million people.

Tárraco originated in mystery. When tradition first tells about it, the Iberian tribe of Kessetanians had their stronghold on the hill. They built its cyclopean walls, which are still the greatest curiosity of the city, and encircle the lower part of the hill in a circumference of about two miles; and their coins and other relics have been dug up in the neigh-

borhood. During the second Punic War, the Romans came about 218 B. C., under the Scipios, and captured it. They were seeking a base from which to oppose the Carthaginians, who had established Cartagena, and were attracted by the special defensive features of the port and hill. They made a harbor and citadel, and the town was extended all over the hill slopes and lower grounds, becoming ultimately the capital of Hispania in the time of Augustus, who made it his winter residence B. C. 26. Then it was adorned with splendid structures, and the people erected a temple to him, which Hadrian afterward restored and enlarged. It became the greatest Roman settlement in Spain, Pliny testifying to its prosperity and attractions and the celebrity of its wines. But the Goths attacking, drove out the Romans in the fifth century, making great havoc, and the Moors under Tarik in the early eighth century destroyed it. During nearly four hundred years subsequently, this great city with its million people of the Roman period, had so completely degenerated, that it became almost uninhabited. The Counts of Barcelona, however, in the twelfth century took some interest in it, but the decay continued, and its trade had gone to the Christians of Barcelona on the one side, and the Moors of Valencia on the other. It revived somewhat in the middle ages, when various Church Councils were held here, and in 1811 the French under Suchet captured and plundered it.

The old walls exist, the fortifications are ruined, but it is a most interesting antiquarian gem, with many Iberian and Roman remains, the houses being largely constructed of the materials taken from their old buildings, and the harbor has a good trade, particularly in the wines of the district, the vintages being stored for ripening in the large underground *bodegas*.

Surmounted by the archbishop's palace and the cathedral, the hill has on its slopes, the irregular and narrow streets of the old town, the base being enclosed by the "cyclopean walls," and having on its southeastern verge, toward the sea, the ancient Roman circus. To the southwest spreads the new town, on the lower surface around the harbor and beyond. The old walls are well preserved on three sides of the hill, but on the western side only the foundations now exist. The height of these walls is in some places thirty-five feet, and the lower courses, which were placed by the Iberians, are of enormous stone blocks thirteen feet long, six feet wide and five feet high. They are built in primitive fashion, strengthened by square towers, and six of the ancient gates remain. Higher courses were added by the Romans under the Scipios, while there is still later work of the Augustan era. These well-preserved walls of the olden time, are the chief curiosity of the city. To the northward of the hill, but several miles away, is the valley of the Gayá, a stream bringing down a good deal of water from the mountains, and its upper

reaches were the source of supply in the Roman days, by an aqueduct of which there are imposing remains. This aqueduct, twenty-two miles long, has a partly subterranean course, and was restored for use in the early nineteenth century. It crosses high above a valley about two miles from the city, by two tiers of arches, this structure, known as the Devil's Bridge, being about seven hundred feet long. There are eleven arches in the lower tier, the range being forty-three feet high, while the splendid upper tier has twenty-five arches, and is over one hundred feet high. On the road out to the Gayá, is a Roman monument, known as the "Tomb of the Scipios," built in the first century, a square structure in two stages above a platform, and rising twenty-seven feet. The brothers Gnæus and Publius Cornelius Scipio, who were slain at Alcaniz by Hasdrubal, the Carthaginian, are said by tradition to be buried here, but the story is doubted, the inscriptions on the monument being illegible. The remains of the Roman Theatre adjoin the old city walls on the southeastern side, and here a fine promenade has been constructed, the *Paseo de Santa Clara,* upon the walls, giving a pleasant outlook upon the harbor, coast and sea. Overlooking the shore, at one end, is the statue of Admiral Roger de Lauria of Tarragona, who defeated the French fleet of Charles of Anjou off Naples in the thirteenth century. One of the many traditions of Tarragona is that Pontius

Pilate was born here, and his name is preserved in an old tower, supposed to have been a Roman fortification, the Torreon de Pilatus, now a prison, not far from the eastern end of the promenade. Upon the very top of the hill, and part of the archbishop's palace, there rises another ancient fortified tower, which is the landmark and commands a splendid view.

When the Counts of Barcelona essayed to restore this ancient and deserted city, they founded a cathedral, where a mosque had stood on the hilltop, in 1118, but work had hardly begun a half-century later, and the construction was continued at intervals during six hundred years. It is, however, a splendid specimen of the late Romanesque, and is greatly admired. The building is about three hundred and twenty feet long with nave and aisles, and the transepts extend one hundred and sixty feet. The nave is one hundred and sixty-three feet long, the transepts are fifty feet wide, and the capillo mayor extends ninety-three feet further. An octagonal steeple rises over two hundred feet, and chapels surround almost the whole structure. The interior is majestic, the roof being borne by fourteen huge piers, each about thirty-five feet in circumference, and strengthened by half-columns, with sculptured capitals, from which the roof-arches rise. Here is the tomb of the great King of Aragon, Jaime I, the "Conqueror," erected in the nineteenth century, of the materials brought from his monument at St. Poblet, the noted

Cistercian Abbey, among the Prades mountains north of the city, and the old-time burial place of the Kings of Aragon. The patron saint of Tarragona, St. Tecla, has his relics in one of the side chapels, and on his festival day, September 23, the cathedral is hung with tapestries depicting his career. There are well-preserved cloisters adjoining the cathedral, with groined roofs, and Moresque ornamentation, the open garth in the centre being planted with oleanders and other sub-tropical plants. Curious carvings appear on the capitals of some of the columns, and it is here that the sculptor, in his exuberant fancy, has represented a funeral procession of rats, carrying the cat on a bier, which suddenly springing up has scattered the rodent mourners. Flights of steps descend from the western façade of the cathedral to the street, which goes steeply down the hill to the Plaza de la Fuente, on its southwestern slope, where was the Roman circus, its shape being reproduced in the Plaza. Here is an interesting museum of antiquities, including many Iberian, Phœnician and Roman coins. This most ancient place in Spain, is to-day a quiet but charming resort, its hill looking out upon one of the most beautiful scenes on the Mediterranean.

About ten miles west of Tarragona is Reus, a town of mills, where there is an industrious but somewhat turbulent population of about thirty thousand who work in cotton, silk and other factories. They keep

in the town hall the sword of the noted General Juan Prim, the Count of Reus, who was born here in 1814, and it was also the birthplace of the artist Mariano Fortuny in 1839, who died in 1874, leaving his masterpiece unfinished, the *Battle of Tetuan,* in the Barcelona City Hall. Across the Prades Mountains, some sixty miles northwest of Tarragona, is Lérida, the ancient Roman stronghold of Ilerda, which commands the mountain passes to the plateau of Aragon, at the crossing of the ancient Sicoris, now the Segre river, winding down from the Pyrenees to the Ebro. It was here that Julius Cæsar defeated Pompey's legates B. C. 49, and across the Segre the Romans built a bridge, the foundations of which have been preserved, and support the present bridge. In this rapid river, tradition tells that Salome, daughter of Herodias, met retribution. She had danced before Herod, and the grateful king, saying he would grant any request she made, she demanded the head of John the Baptist on a charger. She married a Roman general, who went to Spain, and was made Governor of Lérida. The girl was fond of skating, and going upon the Segre she broke through the thin ice, and it closed in upon her, the sharp edges cutting off her head, which went dancing down the rapid stream for several miles before it could be recovered. Lérida stretches along the water's edge and up the hill slopes, to the spacious castle occupying the summit. Upon the winding street leading to it, is the

Church of San Lorenzo of the thirteenth century, the nave originally a Moorish temple and afterward a mosque. The old cathedral is within the castle ramparts, and for nearly two centuries past, the once sacred edifice, which was founded by Pedro II of Aragon in 1203, has been used as barracks by the garrison. Its tower and campanile are conspicuous in the view, while a new cathedral was built in the eighteenth century lower down and nearer the river.

MONTSERRAT.

The vale of the Segre is bordered on the eastward, by the high mountain ranges dividing Aragon from Catalonia, and crossing the summit at 2,400 feet elevation, the railway from Aragon out to the Mediterranean coast, descends to the valley of the Llobregat, flowing into the sea to the southward of Barcelona. Its tributary, the Cardonar, comes from the mountain fastnesses to the northwest, the waters being brackish, especially after a rain, for up that stream is the famous Montana de Sal of Cardona. This river, in its course, almost encircles a lofty hill, on which is the old town of Cardona, dominated by a castle. Between the river and the castle is the Salt mountain, about three miles in circumference, and rising nearly three hundred feet, being the property of the Duke of Medinaceli. This mass of the purest rock-salt was known to the Romans, and is mentioned by Strabo. It is worked like a mine, some

of the shafts being very deep, and one of them, the *Furad Mico* or "squirrel's hole" is a mile long. The sun shining on the salt crystals, makes them sparkle brilliantly, and the miners carve out of the salt, various curious objects, which they sell to visitors. Along the Llobregat valley, on its western side, rises the famous Montserrat, its long summit seen conspicuously against the horizon, being cut down by the deep fissure of the Valle Malo, intersecting the top. The Llobregat winds around the northeast and southeast bases of the mountain, through a deep valley, and then flows off southeastward among the hills to the coastal plain at Barcelona. From the village of Monistrol, a mountain railway crosses the river, and ascends circuitously to the monastery, by the cog-wheel system, the distance being about five miles.

This celebrated mountain is a mass of rock, about fifteen miles in circumference, its axis extending from southeast to northwest, and the enormous precipices forming the edges, seeming to make the summit almost inaccessible. Its highest peak of San Jerónimo, at the northwestern end, rises 4,070 feet, while at the eastern end, the fissure of the Valle Malo, with a torrent rushing down it, descends in huge terraces to the river. Upon a promontory about two-thirds of the way up, overlooking one of these terraces, is the monastery. The fissure gives it the name of Montserrat, the "serrated mountain,"

and it is one of the most celebrated places in Spain. Its fantastic formations sharply outlined as the mountain rises in almost complete isolation from the plain, were called by the Moors, the *gistares* or "stone watchmen." The serrated sky-line was compared by de Amicis, to "a chain of slender triangles, or a royal crown drawn out till its points resemble the teeth of a saw, or so many sugar loaves ranged in a row." The Catalans have always known it as their *Montsagrat* or "sacred mountain," while the German traditions of the middle ages located here their *Monsalwatsch,* which bore the Castle of the Holy Grail. It is a curious fact that the romantic literature of the middle ages connected the Holy Grail with the struggles of the Spanish Christians against the Moors, it being invoked in aid of the former, so that the populace believed it to have really been brought to this mountain. It was the central object in the prophecies of Merlin, being the bowl used by the Saviour at the Last Supper, in which he changed the wine into his blood, and it was preserved by Joseph of Arimathea, when it received the blood flowing from the wound in the side of the Saviour on the cross, Joseph — his life prolonged by the possession — taking it throughout the world in subsequent centuries according to the traditions.

The Montserrat Monastery, which is in a superb situation at about 2,900 feet elevation, is one of the oldest and most celebrated convents in Spain. The

Benedictines are believed to have been here before the Moors came, and the tradition is that St. Luke made *La Santa Imagen,* a small wooden figure of the Virgin, which was brought about A. D. 50 to Barcelona by St. Peter, and found its way here. When the Moors captured the mountain in 717, this image was hidden to prevent its falling into their hands, and all trace of it lost. In 880, however, some peasants who were tending their sheep in the Valle Malo, below the convent, discovered it in a grotto, and started to take it to Mauresa, a village farther up the river. When they had gone a little way, the miraculous image refused to be carried beyond a spot near the convent, which is now marked by a cross, and the miracle led to the erection of the chapel, for the preservation of this sacred relic, which afterward became, by enlargements, the great monastery. A chapel also was built over the grotto where the image was found. The monastery was placed in charge of the Benedictines, in the tenth century, who brought a company of monks from Rapoli in the mountains north of Barcelona. It became very wealthy, but lost its possessions in the Napoleonic wars. There are about twenty monks now in the establishment, and they have many thousands of visitors, mostly pilgrims.

The ancient monastery is in ruins, there remaining however an unfinished bell-tower, the façade of the church and the cloisters, relics of the fifteenth

century. The later buildings of the new monastery surround an arcaded court, three sides being occupied by the secular houses, and the fourth by the church, a Renaissance structure begun in 1560, under Philip II, and completed during that century, an apse in Romanesque having recently been added. The church is only a nave, having no aisles, and this nave is remarkable, being about fifty feet wide and two hundred and twenty-five feet long, rising almost one hundred and ten feet, so that the interior view is imposing. On each side are six chapels, while above the high altar, and in the most sacred place, is the prized relic *La Santa Imagen,* blackened by age. Four candles surround it and are kept always burning. Each morning at ten o'clock this crucifix is shown to visitors, while the monks chant. In the sacristy are kept the valuable wardrobe and jewels belonging to the image. Ignatius Loyola, the founder of the Jesuits, when he determined in 1521 to abandon the life of a soldier, came here and hung up his weapons before the holy relic, taking a vow to devote himself to the service of Christ and the Virgin. There are walks in various directions from the monastery, disclosing superb views. The route to the highest peak, San Jerónimo, at the northwestern verge of the mountain, goes at first down into and crosses the Valle Malo and its rapid stream, the torrent of St. Mary. This remarkable fissure is believed by the people here, to have been cut into the

mountain when Christ died on the cross. The ridges on either side are topped by fantastic pinnacles of weather-worn rock, several hundred feet high, which are known as the *Penascos* or "Guardians of the Holy Grail." One group represents a procession of monks, others are like fingers and flutes, and there are also reproductions of a saddle and a skull. The summit, called the Mirador, is reached by a dangerous climb over slippery stones, which is rewarded by a glorious view extending from the snowy range of the Pyrenees in the north, far over the Mediterranean south and east, with the Balearic islands visible on clear days along the southeastern horizon. All about are the Catalonian plains and mountains, shut in on the west by the sombre ranges bounding Aragon.

BARCELONA.

About twenty-five miles southeast of Montserrat is the greatest Spanish city and seaport of the Mediterranean, Barcelona, having a half million population and the reputation of being the wealthiest municipality of the Kingdom. The Llobregat intervale broadens into a fertile plain as it approaches the sea, while to the northeast the river Besós flows out through another extensive *huerta*. Between them, and enclosing a third intervale, are ranges of hills, the basin they environ being about six miles long and three to four miles wide, with a small har-

bor at its seaward end, the outlet of a little stream, the Riera de Malla, that flowed through the basin. Such an attractive haven early had a colony on its shores, but the first establishment was prehistoric, and mythological tradition attributed it to Hercules, when he came over the sea to explore these lands, and clove down the Strait of Gades to make the Pillars of Hercules. The Iberians were here, and the Phœnicians, and the town dawned upon history in the Carthaginian era as Barcino. The Romans made it a colony, which grew until it outranked all others on this coast, their town occupying the shores of the harbor, and the slopes of an oval hill behind, known as Monte Táber, where stood their citadel and temple, and where remains of Roman walls and gates, with some Corinthian columns, are still preserved. They called the place Barcènona, and the Moorish conquest in the eighth century made it Bardjaluna. They held it about ninety years, when the Franks took it, and the town again became Christian under the Carlovingian empire of the Franks, but Wilfred the Shaggy, its governor under Charles the Bald, rebelled in the later ninth century, and established its independence as the Countship of Barcelona, his successors holding it and Catalonia, until, through marriage alliances, it was united with Aragon. The "crown of nine points," worn by the sovereign, ruling the County of Barcelona and of Catalonia, is a highly prized memory and is reproduced every-

where in the city decorations, the nine pointed crown in golden tips adorning dwellings, lamps and everything in the municipality, and recalling its former greatness.

This was the period of its highest prosperity, when Spain had forty millions of people, and Barcelona and its suburbs nearly a million, its commerce making it one of the greatest Mediterranean seaports, rivalling Venice and Genoa, and controlling a large part of the lucrative trade with the Levant. It then owned much of the shipping of the great sea, and Prescott says the port "thronged with foreigners from every nation, became a principal emporium in the Mediterranean for the spices, drugs, perfumes, and other rich commodities of the East, whence they were diffused over the interior of Spain and the European Continent." In the thirteenth century Jaime I of Aragon gave it the famous *Consulado del Mar,* or code of maritime law, known as the "Code of the Maritime Customs of Barcelona," which was the commercial and maritime legal authority of Europe throughout the middle ages. Afterward the discovery of America and the changes in trade routes affected its maritime supremacy, and Barcelona declined. The transfer of the Spanish capital from Aragon to Castile, and the rivalries of the Spanish ports on the Atlantic, made the people discontented, as they blamed their misfortunes on the Spanish Government. They repeatedly revolted, sympa-

thized with France, and in 1715, the Spanish Bourbon king built a citadel on the northeastern verge to control them. This was always a sore point with the people, who became, as their commerce declined, more and more a manufacturing community, and for over a century, the city's history was chequered by insurrections, street-fights and outbreaks, the object being to get rid of the hated citadel. Barcelona and Catalonia generally have always cherished an antagonism to the Castilians, and hence, they have always helped the various Carlist uprisings. They did not get rid of the citadel until 1869, when its site, much to the popular gratification, and through the kindly intervention of General Prim, was converted into a public park.

The city is beautifully located. The undulating basin, in which it is built, slopes from the harbor gradually upward to a range of hills at the northwest, of which the highest, Tibidabo, is elevated nearly 1,800 feet. On either side, this basin is bounded by other hills, the Montanes Malas to the northeast, and the Montjuich, nearly 700 feet high, a long ridge to the southward, rising coffin-shaped from the valley of the Llobregat, and gradually ascending toward the eastern front, where it falls off precipitously to the sea. Upon the eastern and highest summit is the present great defensive fortress of Barcelona, the Castillo de Montjuich, which can accommodate a garrison of ten thousand men. This height was scaled and

captured by a brilliant movement in 1705, by Lord Peterborough, shortly after the English had taken Gibraltar. This famous hill, originally the Roman Mons Jugi, the "mountain of the yoke," gives exquisite views, and on its southwestern slope, away from the city and facing the Llobregat, is one of the chief city cemeteries. On the western side of the mountain, the lowlands stretch off to the Llobregat. The extensive plain with the enclosing hill slopes is now covered by the great city, having a splendid mountain environment. Palaces, factories, houses, gardens and groves, make a striking combination, as they are spread over the wide surface, upon which the interested visitor can look down from various high elevations of the many surrounding hills. The older city had its walls and fortifications all removed in 1860, and replaced by attractive boulevards, known as the Rondas. This was an irregular hexagon-shaped town, down through which came the Riera de Malla, which has been covered over and made into a wide and attractive tree-shaded street called the Rambla, from the river bed. This stretches back northwestward through the town from the harbor, and northward from its central part rises Monte Táber, where now stands on the highest point the great Barcelona Cathedral.

There is pointed out on the Columbus Promenade, a bust of the famous author Miguel Cervantes, upon a house standing on the site where formerly was his

residence. Cervantes was born in 1547, but when he lived in Barcelona is not stated. He wrote his great work late in life, finishing it at Madrid in 1614, dying there the same day as Shakespeare, April 23, 1616, St. George's Day. The immortal hero of romantic Spanish chivalry, whom Cervantes created, Don Quixote, must have come naturally by his admiration for Barcelona, which he describes as "the seat of courtesy, the haven of strangers, the refuge of the distressed, the mother of the valiant, the champion of the wronged, the abode of true friendship, and unique both in beauty and situation." This Columbus Promenade, planted with palms and about one hundred and forty feet wide, is the northwestern boundary of the harbor, which made the greatness of the medieval city, despite its restricted size, for it is barely three hundred acres in extent, being about a mile long, and having its sea entrance from the south, a thousand feet wide. Two moles shelter it from the sea, one being nearly a mile long, and both forming popular promenades. Statues adorn the Columbus Promenade, erected to noted shipowners and admirals, while at its southwestern end, in the Plaza de la Paz, which forms the southeastern termination of the Rambla, is a splendid monument to Columbus erected in the later nineteenth century. Upon an iron column, at two hundred feet elevation, is a gilded ball, which supports a colossal statue of the discoverer, twenty-three feet

high. The base is a stone platform, adorned with bronze reliefs of scenes from his life, medallions of his patrons, and allegorical figures of Catalonia, Castile, Leon and Aragon, and having eight bronze lions on guard around it. From this monument, stretches the wide tree-shaded Rambla, the principal street, nearly a mile northwest, a most attractive highway leading through the heart of the old city. Here are the hotels, banks, theatres, cafés, and many of the principal buildings, while to the westward of the Plaza de Cataluna, at its termination, is the Barcelona University with modern buildings, about 2,500 students, rich scientific collections, and a library approximating 200,000 volumes. Alfonso V founded this University in 1450, but it was taken away to Cervera in the early eighteenth century, and not reopened here until 1842. It is now in prosperous condition. The old Rambla is extended far to the northwest, through the newer city, as the Rambla de Cataluna, and to the eastward and parallel, is another splendid tree-lined street, two hundred feet wide, and nearly a mile long, also extending northwest from the Plaza de Cataluna, the Paseo de Gracia.

It was upon the Rambla, in the latter part of July, 1909, the recent outbreaks began that for a short time threatened to extend throughout Catalonia. The restless people of Barcelona, on July 26, declared a general strike, as a protest against the

recruiting of Spanish troops to go to Morocco to defend Melilla, and the government immediately declared martial law. The first collisions, with many killed and wounded, occurred that day on the Rambla, but the populace soon triumphed, and by the next day were in full possession of the city. Barricades were erected, the authorities driven out, and the insurrection became almost universal. But the anarchists soon got in control, and the mobs turned to plundering and burning convents and churches, forcing the monks and nuns to flee. There were thirty-five of these sacred edifices destroyed within two days. The government sent warships into the harbor, and brought large numbers of troops from the neighboring country, while from the heights of Montjuich a constant cannonade was directed at the districts held by the rebels. Soon the arriving troops drove them out of most places, and they made their final stand in one of the public squares, where they were mowed down by machine guns and trampled by cavalry, being overpowered July 29, after a terrible contest. During the riots there were about one hundred people slain and a thousand wounded. Over four hundred captives were taken to the fortress, and about two hundred of the leading rebels were summarily tried, condemned and shot. The rebellion was thus suppressed, and the city quieted under government control early in August. It was the execution of Professor Francisco Ferrer by court

martial, as the leader who inspired this rebellion, that caused Socialistic outbreaks during the summer in various parts of Europe.

Monte Tâber rises to the eastward of the Rambla, and very nearly in the centre of the ancient city. Upon its highest part, the Romans built a temple which was dedicated to Hercules, and afterward the Moors had a mosque. Now, it is occupied by the cathedral, dedicated to Santa Eulalia, the patron saint of Barcelona, not a very large edifice, but regarded as one of the noblest existing creations of the Spanish Gothic architecture. There was a church here in the eleventh century, of which some parts remain, and this structure, at first called the Holy Cross, was begun in 1298, the crypt being finished in 1339, and dedicated to Santa Eulalia. It took another century to build the church, but it was not entirely finished at that time, and the northwestern façade was only completed in 1890. This is fronted by a plaza on the sloping hill, and approached by a wide flight of steps, making a very impressive view. Two towers rise one hundred and seventy feet above the transepts. The structure is two hundred and seventy-five feet long, and about one hundred and twenty feet wide, the nave being eighty-two feet high and forty-two feet wide, separated by lofty clustered columns from the aisles, which have many chapels built out from them. The windows are very small, but display splendid fifteenth century stained

glass, giving fine scenic effects, particularly in the late afternoon, but the interior is dark, though thus adding to its impressive solemnity. The coro is adorned with reliefs, depicting scenes from the life of Santa Eulalia, and has above the stalls, coats-of-arms recalling the Chapter of the Order of the Golden Fleece, held here by Charles V in March, 1519, which was a very brilliant gathering. The northeastern doorway, entering between the nave and the Capilla Mayor, has over it a relief depicting the fight between Vilardell and the Dragon. The legend was that the Moors let loose a huge dragon upon the Christians, when the knight Vilardell bravely attacked and slew it. Vainly boasting of his victory, he held his sword aloft, whereupon some drops of the dragon's poisonous blood trickled down upon him and he died.

In the Capilla Mayor is a sarcophagus of St. Severus, and a flight of steps descends to the crypt, containing the tomb of Santa Eulalia, in an alabaster shrine of the early fourteenth century. St. Severus' remains were transferred here from a chapel nearer the harbor, in 1339. In the other chapels are various tombs and monuments of ecclesiastics. In one of them is the *Christ of Lepanto,* the image with a bowed head which Don John of Austria had in his flagship, at the noted battle against the Turks, in October, 1571, the popular belief being that the sacred image bent its

head to avoid a Turkish bullet. A huge Saracen's Head is placed below the organ, in the northwest transept. Four Gothic cloisters, finished in the fifteenth century, adjoin the cathedral on the southwest, having on that side a row of chapels backing against the row within the cathedral. In the inner court are foliage plants, and there is an equestrian statuette of St. George, forming a fountain. A sarcophagus in one of the chapels contains the remains of Alfonso III of Aragon, who died in 1291. The adjacent Episcopal Palace dates from the tenth century, and incorporates some Roman remains. In the court of a house near by, are built in the wall three Corinthian columns, fifty feet high, taken from the portico of the Temple of Hercules which stood on this hill. On the Plaza del Rey, not far away, is the Museum of Antiquities, in a Gothic church of the thirteenth century, and the General Archives, erected in the reign of Charles V, containing over five millions of documents, including many precious manuscripts, procured from old convents, when they were disestablished. The Plaza de la Constitution, southeast of the cathedral, is fronted by fine old buildings. Here is the Palace of the Provincial Deputies, with a splendid fifteenth century Gothic façade, the interior halls adorned with paintings by Fortuny and other Spanish artists, including portraits of all the Counts of Barcelona. The City Hall, on the other side of the Plaza, has a handsome

Barcelona.

of Jerusalem. It was at first cruciform, with four arms of equal size, but the western arm was afterward extended. Here is the tomb of Marshal Miguel Boera, an ancient Spanish commander in the reigns of Ferdinand and Charles V. Near the harbor originally stood the Chapel of Santa Eulalia, and it was replaced by the Gothic Church of Santa Maria del Mar, built in the fourteenth century, and having a splendid late Gothic façade, with large doorway and rose window, two slender octagonal towers rising above. The nave is forty-two feet wide and one hundred and twelve feet high, making a most imposing interior. Narrow aisles flank the nave, and there are chapels on either side, and also radiating from the apse. This church has several fine paintings, and also the sarcophagus of Santa Eulalia, which is in the Baptistery, and is now used as a font. It is one of the best attended churches in Barcelona, but had a horrible tragedy on June 7, 1896. The elaborate Corpus Christi procession had come to the church, and was just entering, when a bomb was thrown into the crowd by an anarchist, twelve persons being instantly killed, and fifty injured, several afterward dying.

The Plaza de Palacio, which is southeast of Santa Maria del Mar, is an open square finely decorated, around which are various buildings, devoted to the maritime industry of the city, which here centres. A handsome marble fountain plashes on the square,

and it is fronted by the Custom House, Exchange, and various warehouses and shipping offices. The Exchange, or Lonja, was built in the fourteenth century, and modernized in the eighteenth, its grand hall, one hundred feet long and seventy-five feet wide,— the *Sala de Contrataciones,*— being the centre of active business in the afternoons. The harbor and shipping are in front of this Plaza, with the maritime suburb of Barceloneta, to the eastward, on a peninsula projecting into the sea, the Mediterranean surf washing its southeastern verge. To the northward of the Plaza, rises the hill where the hated citadel stood, now a pleasant park of seventy-five acres, having at its main entrance, in grateful memory of the man who secured the removal, a bronze equestrian statue of General Prim. There are palm houses, a conservatory, museums and zoological garden. This is the chief holiday resort for the people. From its northwestern side extends the grand Salon de San Juan, a wide promenade, with four rows of trees and adorned with statues of prominent Catalans. Here is the modern Palace of Justice, the most elaborate of the new buildings of the city. The Salon has, at its northwestern termination, an Arch of Triumph, erected in 1888, at the entrance of the Barcelona Exhibition. To the eastward, and overlooking the sea, is the Eastern Cemetery. It is divided by high walls into sections, these walls having rows of oblong niches, one above the

other, their narrow ends turned toward the walks. The coffins are put in these niches, the openings being then closed. If the niches are not purchased from the city, the remains of the dead are only permitted to remain four years, when they are removed to a potter's field. Many of the tombs of the wealthy have elaborate monuments.

To the southward of the Park is the Plaza de Toros, the great "Bull Ring" of the city, which will accommodate over fifteen thousand spectators. These bull-fighting arenas, where are exhibited the great national amusement of the Spaniards, are found in all the prominent cities and towns, while in smaller communities the fights usually are in the market squares, the country having over four hundred such places for bull-fighting. The Barcelona arena is encircled by seats for the spectators, the higher places being the choicest, and a barrier about five feet high encloses the arena, having a narrow passage around it. There is a hospital, and also a chapel attached, where the fighters partake of the sacrament and have prayers before entering the combat. The fights are under the municipal guidance, and one of the city officials presides, and gives the signal to begin. This national pastime of the Spanish people, despite its brutality, has such a strong hold upon their affections, that it cannot be abolished, neither the government nor the church being able to make headway against it. A survival of the Roman and Moor-

ish times, these fights were an aristocratic prerogative for festal occasions, down to the sixteenth century, and mounted knights then did the fighting, usually with lances, and fatal wounds were frequent. Now, the method is less dangerous for the man, but more cruel for the bull, and its adoption dates from about the seventeenth century, after which time the sport gradually fell into professional hands. Sundays and holidays are the bull-fighting days, and the performance is generally omitted in winter. Andalusia raises most of the bulls, and the Duke of Verágua, the descendant of Columbus, is a prominent bull raiser. They are valued at $200 to $300, and for several hours previous to the fight, are kept in dark stables or dens, being goaded into a state of excitement before being driven into the arena. The most agile bull-fighters also are generally Andalusians and popular *espadas* or matadors enjoy large incomes, usually $2,000 to $3,000, while some celebrities receive much more. The luck of Rafael Guerra of Cordova is often cited, who was thirty-two years of age in 1894, and during that season his income was $75,000, having killed two hundred and twenty-five bulls.

When the fight begins, the *alguacîles,* or police, ride around the arena, to the sound of trumpets, and clear it of people, after which the bull-fighters enter in procession, the band playing a march. The *espadas* walk first, followed by the *banderilléros,* the

picadors mounted, and the *chulos* or attendants on foot, with the mule team used in dragging out the dead horses and bulls. A salute is given the official chief, and he then throws into the ring, the key of the bull-den, the *toril,* which being opened, an excited bull rushes out into the arena. There are three acts in the bull-fight. In the first, the mounted *picador* receives the attack of the bull, prodding him in the neck with a pike, and trying to withstand his onset, though generally the worn-out horse the *picador* bestrides is wounded and overthrown by the bull, both horse and rider falling in the sand. The *chulos* on foot, to worry the bull and distract him, dexterously wave their red cloaks, to draw him off to the other side of the arena, and enable the *picador* to escape. This is repeated, and when the bull is sufficiently wearied by the *picadors* and *chulos,* the second act begins, the attack of the *banderilléros.* These young and very active gentlemen meet the bull at full charge, jump cleverly out of his way, occasionally vaulting over the barrier to escape his horns, and do everything possible to infuriate him. They stick their *banderillos* in his neck when passing, these being barbed darts, having streamers of colored papers, and they do it from the side, or even from the front, sometimes sitting in a chair and nimbly avoiding the attack. Explosive fire-crackers are often used with these darts, and everything possible is done to anger and at the same time

fatigue the bull. They vault over his back with a pole, leap between his horns, and do the most audacious and apparently reckless acts, the bull, all the while, becoming more and more angry and exhausted. This having proceeded long enough in the opinion of the presiding officer, the signal is given for the third and last act. The *espada* then appears, armed with a short straight sword and a red cloth; presents himself in front of the official box, and announces the death of the bull in the president's honor. The object of the *espada,* who begins teasing the tired and very angry bull with his red cloth, is to get him into position for the death blow. When the proper time comes, the *espada,* stepping quickly aside as the bull rushes at him, plunges the sword into his neck in passing, the stroke going downward to the heart. If this is successfully done the bull falls. The first stroke, however, rarely succeeds, and it has to be repeated. Sometimes the *espada* receives the direct rush of the bull, the animal running on the extended point of the sword. The attendants bring in the team, and the dead bull and horses are dragged out; the show being soon renewed with a fresh bull. The exhibition continues until twilight ends it, several bulls being killed. This butchery, while popular with the people, is disgusting to many visitors, and most tourists who once witness a bull fight are amply satisfied, and do not attend a second exhibition of the national game.

The true Catalan regards Barcelona, not only as the greatest city of Spain, but also as the best in the world. Its later development has been chiefly in industrial pursuits, and the large factories are in the suburbs. These huge mills intermingle with the country-houses and gardens in the northern suburbs, stretching off to the pretty valley of the Besós, which has cloven a passage through the high ridge of Monte Tibidabo, northwest of the city, to get out to the plain and the sea, most of its waters being diverted, however, for the uses of the great municipality. For miles these suburbs and their mills are passed, on the railways going toward the northern Spanish border. Here are Badalona, the Roman *Baetulo,* Mongat with its battle-scarred castle, Vilasar with the *atalaya* towers on the coast, built long ago as look-outs for pirates, Mataró, which was the *Iluro* of the Romans, the warm springs of Caldetas, Arenys de Mar, where the Barcelona merchants maintain a nautical school, and other industrious villages, the coast railway piercing the great headlands that here come out to the sea, through tunnels and amid superb scenery. The river Ter flows down, out of the mountains, from among the coal and iron mines of San Juan, and up this stream are Vich, on a tributary, with its ancient cathedral of the eleventh century, and magnificent cloisters; and Ripoli, now a town of coal-mines, but formerly the seat of the renowned Benedictine Monastery of Ripoli, not long ago sup-

pressed. Wilfred the Shaggy built its great church for the burial place of the Counts of Barcelona, beginning the work in the ninth century, which was not completely finished until the fifteenth. The Ter, flowing through its splendid valley southward from Ripoli to near Vich, turns eastward to seek the sea at the Gulf de Rosas. Its diversion is caused by meeting the northern spurs of the great ridge of the Montseny rising about 5,700 feet, the imposing serrated top being seen from long distances in every direction.

TO THE PYRENEES.

Farther down the Ter is Gerona, in a valley surrounded by hills, formerly a fortress, the town now spreading over the plain and up the slopes of the Montjuich from the river to the fortified heights above, the picturesque balconied houses hanging over the stream and its tributary, the Ona. The Romans had their camp and settlement of *Gerunda* here, and the Moors capturing it, the name became Djerunda. Charlemagne took it, and the Moors again got possession, but it afterward fell into the hands of the Count of Barcelona. It is noted for the heroic defence against the French in 1809, when a small Spanish and English garrison stood a siege for seven months by an army of thirty-five thousand, finally being starved out after their ammunition was all gone, and surrendering in December, the French

losing fifteen thousand men during the protracted contest. Gerona, in its palmy days, had a popular university, and its chief relic to-day is the cathedral, begun in the early fourteenth century. The nave is unusually wide, seventy-three feet, flanked by huge buttresses supporting the roof, and having side chapels between them. Beyond Gerona, the railway follows down the fruitful valley of the Ter, crosses it, and turning northward goes over the watershed to the Fluvia vale. The snowy range of the eastern Pyrenees bounds the northern horizon, and we recognize its famous peaks, the Canigou, rising 9,135 feet, being conspicuous, while there is cleft down in the top of the range the gap of the Col de Portus, where Hannibal crossed B. C. 218. The railway traverses the wide and luxuriant plain of the Ampurdan, watered by several streams, its vineyards noted for their wines. Its chief town is Figueras, having the Castle of San Fernando occupying a hilltop. This place makes wine and is said to be exposed to fevers. There is, in the spring, a pilgrimage procession, *la tramontana,* to a mountain shrine fifteen miles northward, the services continuing three days. In 1612 we are told such a pilgrimage had the effect of bringing the *tramontana,* the "north wind," which chased away a fever epidemic, and the ceremony has been an annual duty ever since.

Down at the sea, the various streams flow into the semicircular verge of the wide and deeply indented

Gulf de Rosas, its northern shore being the great terminating buttress of the Pyrenees, Cap Creus. Beyond Figueras, the railway pierces the ridge by a tunnel, and thus crossing the boundary enters France, bound to Perpignan, Narbonne and the north. On the border of the sea, at the Gulf de Rosas, was a place of earliest settlement of this Iberian shore. Ten miles east of Figueras, under the shadow of the great ridge terminating in the boundary cape, is the little port of Rosas, naming the Gulf, to which the Greeks came, calling it Rhode. On the shore to the southward, was the Greek colony of Emporion, while inland upon a hill, still survives the castle succeeding that which the Iberians had when the Greeks arrived, now known as the Castellon de Ampurias, and thus naming the Ampurdan. Various relics of these original settlements have been taken to Gerona, and are in the museum there. They were all afterward incorporated into the Roman Emporiæ, though very little remains of these early Iberian and Greek colonies but a memory. Over the waters of the broad bay, watches now, as in the earliest times of ancient Iberia, the great northern buttress wall of the Pyrenees, its snowy summit line contrasting most beautifully with the charming blue of sky and sea.

See the mountains kiss high heaven
And the waves clasp one another.

THE RIVIERA

V.

THE RIVIERA

The River Rhone—Camargue—Arles—Saintes Maries—Aigues Mortes—Languedoc—Montpellier—Cette—Agde—Beziers—Narbonne—Estagel—Perpignan—Prades—the Canigou — Cap Créus—Marseilles—If—Toulon—Hyeres—Fréjus — St. Raphael—Liguria—Cannes—Iles de Lérins—Antibes—Nice—Cimiez—Villefranche—Corniche Road—Beaulieu—Eze —Turbia—Monaco—Monte Carlo—Roccobruna—Mentone—Ventimiglia—Bordighera—San Remo—San Lorenzo—Porto Maurizio—Oneglia—Andrea Doria—Alassio—Albenga—Savona—Abbissola—Cogoletto—Christopher Columbus—Pegli—Genoa.

THE RIVER RHONE.

Thou Royal River, born of sun and shower
In chambers purple with the Alpine glow,
Wrapped in the spotless ermine of the snow
And rocked by tempests! — at the appointed hour
Forth, like a steel-clad horseman from a tower,
With clang and clink of harness dost thou go,
To meet thy vassal torrents, that below
Rush to receive thee and obey thy power.
And now thou movest in triumphal march,
A king among the rivers! On thy way
A hundred towns await and welcome thee;
Bridges uplift for thee the stately arch,
Vineyards encircle thee with garlands gay
And fleets attend thy progress to the sea!

The river Rhone, thus apostrophized by Longfellow, is a mighty stream. Beyond the mountain

boundary between Spain and France, the Mediterranean is indented far northward, in the Gulf of Lyons, to receive this great river. Beginning high up in the Alps, the Rhone sources are near those of the Rhine. It rushes a mountain torrent into the Lake of Geneva, which purifies its turgid waters, and flowing out a limpid stream, is soon defiled again by the muddy Arve, and one river after another, adding further silt to its swelling current. It breaks through a deep gorge between the Jura and the Alps, comes to Lyons, receives the Saône, and turns southward a noble waterway, carrying vast commerce. Flowing in a fertile plain, between enclosing hills and beautiful shores, it passes many cities, and below Avignon receives the Durance bringing more Alpine silt. Then it comes to Arles, and divides into two channels, the Grand Rhone flowing southeast, and the Petit Rhone southwest to the sea. Enclosed between them is the flat delta island of Camargue, of about three hundred square miles area, largely lagoons and marshes, and constantly growing from the vast alluvial deposits the river carries down. A new delta is also forming, out in the Gulf, at the estuary of the Grand Rhone, and both it and the Petit Rhone have their mouths obstructed by sandbars. The French coast, both east and west, is a series of lagoons, and these are availed of by the shipping, which get into the river by means of ship canals, the wide delta spreading far away on either

hand. It was here the Phœnicians established a belt of colonies, along the coast and in the lower Rhone, some dating as early as the nineteenth century B. C. It was by this route into the Alps that Hannibal 218 B. C. crossed the mountains, attacking the Roman empire at its centre. The Rhone and Saône were Cæsar's great natural barriers, defending Gaul against the invading Helvetii, and the whole country hereabouts displays Roman remains.

Arles was the Roman Arelate, rivalling Marseilles in the days of the Cæsars, when it was known as the Gallic Rome, and had a hundred thousand population. Here lived Constantine, and he completed the Roman theatre which Augustus began. Its vast amphitheatre, one of the largest in France, is an oval 450 feet long, built in two stories of sixty arches, Doric surmounted by Corinthian, and accommodates twenty-six thousand spectators. It was converted into a citadel afterward, four towers being built, of which three still stand, and its chief use now is for Sunday bull fights. The theatre is in partial ruin, for the people took away much of its materials to build churches. Here was found, in the seventeenth century, the Venus of Arles, now in the Louvre at Paris. A Roman obelisk of grey granite, forty-nine feet high, stands in the Place de la Republique, surmounting a fountain, and adorned with bronze lions. Constantine's fourth century palace is down by the Rhone. The Roman cemetery on the eastern verge

of the town — the Aliscamps — became so popular for interment in medieval days, that bodies were brought here from great distances, Dante's *Inferno* referring to it. It was long neglected, but recently has been partially restored. St. Paul's disciple, Trophimus, introduced Christianity, and the Cathedral of St. Trophimus was built in the seventh century, several times rebuilt, and its interior walls are hung with old tapestries. Here was crowned, in 1178, the Emperor Frederick Barbarossa.

Arles looks out over the flat broad delta of the Rhone, full of water courses, and having Roman remains everywhere. Upon the low Mediterranean shore of the Camargue, twenty-four miles southward, is the quaint village of the Saintes Maries, named for the three Marys — Mary Magdalen, Mary of Bethany, and Mary the mother of Jesus. The tradition tells that they landed here, along with Lazarus, St. Maximin, and their black servant Sara. Their relics are in the church, and in May and October come popular pilgrimages to the shrines, while the gypsies also flock here in honor of the servant Sara. To the northwest about twenty miles, on a lagoon connected by a canal with the Rhone, is Aigues Mortes, named from the Latin title of the district *Aquæ Mortua,* or the "dead waters," referring to the swamps and ponds. Here embarked the French king St. Louis, in 1248, in his crusade to the Holy Land, and again, in 1270, on his second crusade. He founded the

port, and his son Philip the Bold, in 1272, began the extensive fortifications, perfected by succeeding kings, which now are a great curiosity. They are on the level land, a rectangle of 1800 by 500 feet, with two gates, twenty towers, and embattled walls, rising in places 33 feet. The Tower of Constance, founded by St. Louis, rises from the citadel at one corner, while at the opposite corner is the Tower of the Burgundians, who seized the town in 1421, but afterward were overpowered, slain, and their bodies thrown into this tower for a tomb, being covered with salt. The place is quiet and gloomy now, almost the only relief being a bronze statue of St. Louis, in the public square.

The region westward from the Rhone, stretching to the Spanish boundary, at the Pyrenees, was the Province of Languedoc, and the Gallia Narbonensis, which the Romans conquered and settled before the days of Cæsar. Its people, in the course of time, came to speak a dialect of poetical rhythm and soft accents, now unfortunately fading away. This dialect named the province, for it was called the *Langue d'oc,* because they used the word *oc* for "yes" instead of *oui* as spoken by the northern French. To the westward in Languedoc, and some distance inland from the Mediterranean, is Montpellier, with eighty thousand people, one of the most prosperous cities of Southern France, a centre of the wine trade and maker of textiles and chemicals, chief among these

being verdigris made by oxydizing copper plates between layers of grape hulls. Seven miles away, on a strip of beach fronting the sea, with a lagoon behind it, is the ruined town and old cathedral of Maguelone. Here was an ancient seaport, which the Saracens, coming from Spain, seized and held until Charles Martel, in 737, captured and destroyed it. The place recovered, but Louis XIII not liking it, in 1633 completely destroyed it, leaving only the cathedral. Charles Martel, when he captured Maguelone, built Montpellier inland, to avoid the sea rovers, but it languished, until its Medical College was founded in the twelfth century, bringing it fame and wealth, and still existing in celebrity, as a University with fifteen hundred students, half being in medical classes. In the religious wars about all the churches in Montpellier were destroyed. It was a Calvinist stronghold when taken by Louis XIII, in 1622, and when he entered, the king said he could find no church in which to say his prayers. There were about sixty churches, the Calvinists first demolishing those of the Catholics, and the latter afterward retaliating. Montpellier has greatly prospered in recent years, and in its bright atmosphere the appearance is pleasing, the place rising from the plain as a grand amphitheatre sloping upward to nearly 200 feet elevation, the high background being the splendid promenade of the Peyron. This was an ancient forum and stronghold, now completely

transformed, and having the imposing Chateau d'Eau, a most copious fountain, to which the water is brought from the hills eight miles away, by an aqueduct terminating in a double tier of arches, seventy feet high and extending a half mile. The aqueduct supplies the city, and from the fountain, the hill falls off sharply on three sides, giving a grand outlook over the spreading city below, upon the broad plain of green meadows and many lakes, stretching off to the distant silver streak of the Mediterranean.

Cette, the port of Montpellier, is about eighteen miles southwest, on a strip of land, between the extensive lagoon, called the Etang de Thau, and the sea. Here is the ancient Mons Setius, rising about 600 feet, and now called Mont St. Clair, upon which the city is built. Cette is mostly modern, and its harbor is composed of three basins, connecting with the Etang, being the terminal port of the noted Canal du Midi, constructed at the end of the seventeenth century, to connect the Atlantic through southern France with the Mediterranean. To the southwest, beyond the Etang, projects the Cape d'Agde, and nearby flows the river Hérault into the sea, having within, the harbor and port of Agde, three miles inland, through which goes the canal. An extinct volcano, on the edge of the town, provided the lava blocks of which it is built. This was the ancient Agatha, there being remains of old forti-

fications, and its castellated cathedral, looking more like a fortress than a church. It suffered in the wars of more than a dozen centuries, its chief history being a horrible story of sieges and sackings by Goths, Vandals, Saracens, Franks, and religious crusaders of various faiths. The Canal du Midi climbs up eighty feet, by a series of locks, to the higher level, and goes through Beziers, whose greatest townsman was Paul Riquet, the builder of the canal, his statue standing in the Public Square. This was the Roman Biterra, and was the scene of an awful Albigensian massacre in 1209, when it was captured, and over twenty thousand inhabitants killed or burnt at the stake. To-day it has forty thousand people, and a prosperous wine and brandy trade.

Fifteen miles southwestward is Narbonne, the extensive lagoon, the Etang de Sijeon, here adjoining the Mediterranean. This was ancient Narbo, colonized by the Romans in the second century B. C., but becoming a decayed town because its port silted up, and living now mainly upon its history of over twenty centuries, and a brisk trade in the highly esteemed "honey of Narbonne." It is built on a plain about five miles back from the shore, with a canal leading out to the sea. In the Roman era it was surrounded by lakes, having ample communication with the Mediterranean; it gave the name to Gallia Narbonensis; and in the chronicles of that time, was described as a large city, with temples,

theatres, baths, triumphal arches and other elaborate structures, of which little remains. The Visigoths held it, till the Saracens took it, and were able to beat off Charles Martel, but Pepin, through treason, got possession for France. The name gradually developed from Narbo to Narbonne, but it could not overcome the closing of the port. The old Cathedral of St. Just is crowned with double battlements, rising 130 feet, and the Archbishop's palace alongside, is a medieval fortress, having three ponderous towers. Southwestward from Narbonne stretch the Corbières, an outlier of the Pyrenees, and on one of the summits, rising 2,000 feet, the Visigoth king Alaric had a castle, but only scant ruins remain.

The valley of the Agly, to the southward, separates the Corbières from the Pyrenees, and here at Estagel was the home of the family of Arago, the famous seven brothers, the town having a statue of François Arago, the most noted, born here in 1786. Beyond, comes out the river Tet, draining the northern slopes of the Pyrenees, and almost dry in summer. This region was Roussillon, and its ancient capital Perpignan, a strong fortress about seven miles from the sea, defends the entrance to the Tet. Here lived, in the twelfth and later centuries, the kings of Majorca, this being part of their domain. King Sancho of Majorca built its massive Castillet in 1319, now a prison. He also began the Cathedral of St. Jean, which is still incomplete. The huge

nave is 230 feet long and 90 feet high, the altars are gorgeously decorated, and the reredos of the main altar is a splendid work in white marble, depicting scenes in the life of St. John. Perpignan, while a French city, has distinctively Spanish characteristics, having been attached to Aragon for several centuries. It has statues of Arago and of Rigaud the painter, born here in 1659. Up the fertile valley of the Tet is Prades, whence various roads go through the mountain passes. To the southward of Prades, rises the noble peak of the Canigou, 9,135 feet, its summit, a narrow stone platform about 25 feet long, commanding a superb view eastward over the Mediterranean, displaying the coast all the way from Barcelona to Montpellier, a hundred miles off to the northeast. Cap Créus, twenty-five miles southeast of Perpignan, is the great terminating buttress of the Pyrenees, protruding into the sea, the boundary between France and Spain.

MARSEILLES.

To the eastward of the Rhone delta, on a well protected bay, is the great French port of Marseilles. Hills separate the river from this bay, and while there is some canal connexion, it is not satisfactory, and a great work is projected, tunnelling through the rocks for over four miles, at a cost of $7,000,000 to make a modern canal between the great river and the port. The harbor early attracted the navigator,

but the origin of the settlement, probably by the Phœnicians, is dim in antiquity. The location is most beautiful, magnificently surrounded by a mountain amphitheatre, the luxuriantly fertile landscape fronting upon the glinting sea. The records go back 600 years B. C. when Greek colonists from Asia Minor controlled the shore, their settlement within the bay being called Massalia, and in 1899, the 2500th anniversary of the colony was celebrated with great pomp. The port afterward made alliance with the Romans to control the sea, and also colonized the adjacent shores and the African coast. Then Julius Cæsar took possession for Rome, and the greatly enlarged city became a seat of Greek learning, whither the patricians sent their sons. There had been an early pagan altar erected to Baal, and this was superseded by a temple to Diana, while Neptune had one on the shore. Lazarus, the brother of Mary and Martha, is said to have come here and lived in caves, that became the catacombs, over which a church was built, named afterward for St. Victor, who arrived as a missionary preaching Christianity. Rome fell, the Visigoths succeeded, the Franks drove them out, and then the Saracens captured the city, whose name all the while was changing, and in the tenth century was called Marseilles. It went ultimately to France, adhered to the lost cause of the King in the Revolution, and was savagely punished. The mob from Marseilles

journeyed to Paris, led the attack on the Tuileries in 1792, then first singing the war song of Rouget de l'Isle, which thus was called the *Marseillaise,* and became the Revolutionary battle hymn, and ultimately the French national anthem. The conquest of Algiers by France, and the opening of the Suez Canal, gave the city a great impetus, and the population exceeds a half million.

Until 1850, the port was the "Old Harbor," a basin of about seventy acres surface on the edge of the bay, but since there have been vast improvements. This old harbor, completely landlocked, has ancient forts at the entrance; St. Nicholas, built by Vauban on a promontory at the left hand side, and Grasse-Tilly, opposite, an inscription on its tower recording the founding of the first settlement. Out beyond St. Nicholas, on another promontory, is the Pharo Castle, a palace given the city by the Empress Eugénie, and now a medical school. A canal behind Grasse-Tilly, leads northward to the spacious "New Harbor," with the protective breakwater of the great Jetée in front facing the sea, over two miles long and costing $10,000,000. Almost the only old building remaining in Marseilles, which is now almost entirely modern, is the Church of St. Victor, under the verge of St. Nicholas. This church is a relic of an Abbey founded in the fifth century, its crypt dating from the eleventh century, and the battlemented towers from the fourteenth.

Notre Dame de la Garde—**Marseilles.**

The "Grotto of St. Lazarus" is in the crypt, and contains a blackened statue of the Virgin, attributed to St. Luke, and a cross which legend says was the one on which St. Andrew was martyred. Pilgrims devoutly reverence these relics. Notre Dame de la Garde rises steeply to the southward, with a bare and fortified summit, where a modern church has succeeded an ancient chapel, and has a large bell tower 150 feet high, upholding a colossal statue of the Virgin, the special landmark of arriving sailors. This elevation gives a good view over the city and harbor, with the grand amphitheatre of mountains on the landward side, and the broad and beautiful sea beyond.

Upon the terrace overlooking the "New Harbor," where once was Diana's Temple, is now "The Major," the modern Romanesque-Byzantine Cathedral of Ste. Marie Majeure, not yet completed, a splendid structure of green and white marbles, 460 feet long and costing over $4,000,000. Its interior has an imposing nave, the aisles surmounted by galleries, and the decoration is rich in marble, mosaic and fresco. The bronze statue of Bishop Belsunce, the most revered prelate of Marseilles, stands in the adjoining square, recalling how he remained manfully, and practically alone, at his post during the appalling plague of 1720, which destroyed forty thousand lives. The modern Palais de Justice is a splendid building, its vestibule

adorned with relief figures of four law-makers, Solon, Justinian, Charlemagne and Napoleon. The bronze statue of Advocate Berryer, who died in 1868, is in front, The finest streets begin at the "New Harbor," the Cannebière, (named from the Greek *cannabis,* meaning "hemp," which designated an ancient "rope-walk" on the site) and its prolongation, the Rue Noailles, leading eastward through the heart of the city. At their junction is the Cours St. Louis, where another series of fine streets crosses at right angles. These main thoroughfares divide the city into four grand quarters. The Bourse is on the northern side of the Cannebière, having a magnificent Corinthian portico of five arches, adorned with sculptures, and an interior Exchange Hall larger than the Paris Bourse. The older town, northward from the Bourse, is a labyrinth of small streets, adjoining the "Old Harbor," through which modern thoroughfares have been opened, their intersection at the Place d'Aix, having a grand triumphal arch, to commemorate the French victory of the Trocadero, near Cadiz, in 1823. It has reliefs of Napoleon's victories, and a later inscription, testifying that Marseilles recognizes the French Republic. The city is proud of two of her sons, and their memorials are universal — Pierre Puget, the sculptor and painter of the seventeenth century, and President Adolphe Thiers.

Marseilles gets its water supply through a great

aqueduct, bringing it from the river Durance, ninety-four miles, by canals, tunnels and aqueducts to the northeastern verge, terminating in the grand Palais de Longchamp. Its centre is a splendid arch, connecting spacious side buildings, containing a museum of art, natural history and antiquities, the arch rising nearly 130 feet. The Palais has extensive pleasure grounds, and its front, on a hill slope facing southwest, enabled the builders to construct an impressive cascade flowing down a flight of steps into a spacious basin. The arch, with its colonnades, rises high above, giving a view over the city and the sea. In the basin, a colossal group represents the Durance, between the Vine and the Wheat, upon a chariot drawn by four bulls. A large part of the water, brought by the canal, is used for irrigation, so that during recent years, the arid soil around Marseilles has been changed to prolific verdure and fertility. The people have myriads of little gardens outlying the city, where they erect *cabanons* of two or more rooms, and spend Sundays and holidays, there being much rivalry in cultivation, and the adornment of these toy houses.

There are islands off the shore, the best known being the smallest, If, about two miles out in front of the "Old Harbor." Its ancient castle, the Chateau d'If, was made famous by Alexander Dumas in *Monte Christo,* the keep, built in the early sixteenth century, being long used as a prison. The

visitor goes out in a steamboat, and is shown the dungeons, the elevated top of the old keep giving a good outlook back at the great city.

THE NAVAL STATION OF FRANCE.

Beyond Marseilles, the coast extends far southward, terminating in the rocky point of Cape Sicié, and behind this, and forty-two miles from Marseilles, is the great naval port of Toulon. Sicié is thrust boldly into the sea, with protective forts upon its cliffs, and nature made, on its eastern side, a magnificent roadstead. A rock-ribbed projection eastward forms Cape Cépet, while to the northeast, Cape Brun extends southward from the mainland, the outer harbor entrance being between them. Pointe Pipady projects within, and partly closes the entrance, a jetty beyond making an effective breakwater. This spacious harbor has Toulon on its northern shore, there being five principal basins, made by the peculiar embayed form of the shore line, all used for naval purposes, excepting a small commercial harbor. The Grande Rade and the Petite Rade, give ample anchorage, defended by the batteries on the eminences all around, the enclosing mountains rising sharply to the Faran summit, 1,800 feet, and the Coudon, 2,300 feet, both crowned by forts. Toulon is thus a fortress of the first class and was always well defended. The old town of Six Fours is on an isolated hill, out on Cape Sicié,

being named for six medieval forts, built to defend as many routes of approach, but now replaced by one modern work. The ancient pilgrimage chapel of Notre Dame de la Garde, is at the end of the cape, at nearly 1,200 feet elevation, a landmark having the signal tower announcing the arrival of ships.

In the dim past, the Phœnicians are said to have made their famous purple dyes on these shores, and then the Greeks came, naming the place Telonion, their Roman successors calling it Telo Martius. It was of little pretension, however, till the eighteenth century. In 1707 it successfully resisted Prince Eugene and the Anglo-Dutch fleets, and was strongly fortified afterward, but in the French Revolution, the Royalists holding it, gave possession to the English, in August, 1793. The French conducted a vigorous six weeks' siege in the autumn, capturing it in December, Napoleon, then an artillery officer, winning his first distinction in these operations. In 1902, in reconstructing the barracks, were found the bones of over a thousand soldiers stretched in layers, without trace of coffins, the victims of the siege. An elaborate modern fountain has been erected, in memory of these wars, in the chief public square, the Place de la Liberté. While the population exceeds a hundred thousand, Toulon has little to show besides the naval works. The Hotel de Ville, fronting the old quay, has sculptures by Puget, and in its squares, a colossal bronze, the Genius of Navigation. The venerable

Cathedral of Ste. Marie Majeure, built in the eleventh century, has a modern façade and belfry, with some of the interior decorations also by Puget. The extensive arsenal, planned by Vauban, and begun by Louis XIV, covers about a square mile, and employs ordinarily fifteen thousand operatives. Every kind of naval work is done here, and numerous warships usually are in the harbor. The spacious Seamen's Hospital of St. Mandrier is on Cape Cépet, nestling under a high hill, which gives a fine view over the harbor. The French naval manœuvres are usually conducted in the extensive roadstead, of over sixty square miles surface, formed by the four Iles d'Hyères, stretching to the eastward, lying off and beyond the long peninsula of Giens, projecting far into the sea.

In a bay on the mainland of this roadstead, bordered by salt marshes, is the town of Hyères, protected from the northern winds by wooded hills behind, rising northeastward into the Maures mountains, an outlier of the Maritime Alps. This is the oldest of the Mediterranean coast winter resorts, possibly now outshone by the more fashionable Riviera towns farther east, but having many sojourners. It is a quiet place, with magnificent gardens of oleanders, palms, olive and orange trees, and is a prolific supplier of Paris with early vegetables, strawberries and flowers, chiefly violets. The date palm is numerous in the street adornments, but the

dates do not ripen. An imposing avenue of palms leads from the railway station to the town, and the public square, similarly adorned, has a pyramid erected to its great benefactor, Baron Stulz, a German tailor who made a London fortune, which he benevolently invested at Hyères. The townsman of chief renown, however, was the preacher Massilon, born in 1663, his bronze statue standing in the Place de la Republique. All about, the hills and shores are dotted with villas and hotels, and from an elevation of 700 feet the ruins of the ancient castle overlook the town. Off the extensive roadstead, and enclosing it, are the four Iles d'Or, which were the ancient Stœchades, all fortified, but having scant population. The Mediterranean coast trends northeast from Hyères, with many winter resorts along the strand, and rising behind them is the Maures range. On its side, are the ruins of the great Saracen stronghold, Le Fraxinet, built to control this district in the ninth century, and most of the villages were originally Saracen settlements. Near the northeastern extremity of the range is Le Muy, the tower held by the Provençals in 1536, when they tried to kill Charles V, who was besieging it. They fired at him, as they supposed, but killed instead the noted Spanish poet Garcilaso de la Vega, whose gorgeous costume made them think he was the king.

Fifty miles northeast of Hyères, and a mile back from the sea, is Fréjus, famous for Roman remains,

the mountain torrent of the Argens having silted up the ancient harbor. It was Julius Cæsar's stronghold, the Forum Julii, which Augustus extended, sending here the galleys captured from Antony at Actium, 31 B. C. It has dwindled to a town of about four thousand people, the old walls enclosing a very much larger space than now populated. Septimus Severus built the amphitheatre, of which the foundations and part of the gallery are preserved. There are Roman baths, and the Porte Dorée, leading to the harbor, has been restored. The Butte St. Antoine, a large mound built to protect the harbor from the northwest winds blowing down the Argens gorge, still exists with three towers, one having been a lighthouse, and a similar mound is at the eastern verge of the filled-up harbor. There are also ample remains of the old aqueduct on arches sixty feet high, which brought the water twenty-five miles from the northeastern mountains. At Fréjus were born Agricola the general, Roscius the actor and Cornelius Gallus the poet. The adjacent village of St. Raphael is a popular watering place, with a grand sea-front of villas and foliage-bordered promenades, extending over two miles. Here Napoleon landed on his return from Egypt in 1799, and here he embarked when exiled to Elba in 1814. The Esterel stretches down to the coast beyond, with splendid cliffs, a volcanic formation of red and gray rocks bearing forests of pine and corkwood. In it is the diminu-

tive but deeply indented harbor Agay, which was Ptolemy's Agathon, the bold headland of Cape Roux rising 1,500 feet, one of the best outlooks from the Esterel.

CANNES TO NICE.

The coast, to the northeastward, makes a grand semicircle around the pleasant Gulf of Napoul, and we have come to ancient Liguria. This was the strip of land along the shore from the Esterel to Genoa, enclosed by the Maritime Alps and the Appenines, and now called the Riviera, meaning literally "the shore." It is mountainous throughout, the high ranges at the back sending down their foothills, promontories and deep valleys to the water's edge, and leaving here and there a few comparatively level spaces at the valley openings and the mouths of the torrents. It is rugged, but fertile, has a grand mountain environment, and displays magnificent scenery. The climate is superb and the slopes facing the southward have luxuriant vegetation, growing varieties of fruits, and especially the olive tree, which is cultivated in terraces upon the lower mountain sides. Charming villages nestle in the valleys, but the streams, which are torrents in winter and spring, are usually dry and rocky canyons in summer. Its salubrity and beauty have given the Riviera world-wide celebrity, its winters are genial, it has many visitors, and there have been developed famous water-

ing places along the shore, attracting the health-seekers and fashionables who make a whirl of gaiety throughout the season.

Spreading along the magnificent hills enclosing the Gulf of Napoul, its hotels and villas surrounded by gardens, is Cannes, looking out upon the sea and the Iles de Lérins, beyond the bold Pointe de la Croisette in front. A breakwater keeps off the waves, which occasionally get so fierce as to batter the sea-wall protecting the Boulevard de la Croisette, the admirable esplanade skirting the harbor. The attractive Allées de la Liberté extend from its western end into town, being adorned with a marble statue of Lord Chancellor Brougham of England, who began coming to Cannes in 1834, made its fashionable reputation, and died here in 1868. Projected into the sea, to the westward, is the elevated Mont Chevalier, giving a superb view, having around it old Cannes, before it got fame, and without much change since, this being its picturesque quarter, the Suquet. The quaint thirteenth century church of Notre Dame de l'Esperance, and the ruins of a tower and castle, are on the summit. Cannes has great antiquity, the Saracens destroyed it in the eighth and tenth centuries, but it was revived and colonized from Genoa. All around the town the hill slopes are dotted with villas, the country is beautiful and highly cultivated, and a paradise of semi-tropical vegetation. Oranges, lemons, figs, almonds, peaches and olives grow in

profusion, the gardens blooming with flowers and shrubs, from which perfumes are made. In a magnificent valley about seven miles from the sea, open to the southward and sheltered from cold winds, is Grasse at a thousand feet elevation, the resort of many delicate invalids, who cannot stay near the coast. It is on an eminence, with steep and narrow winding streets, quaintly picturesque, having traditions going back to the sixth century, and next to Paris, is the chief manufactory of French perfumes. About sixty thousand acres, in the vales and on the favoring hill slopes, are devoted to the cultivation of flowers, there being annually grown about two million pounds of roses and four million pounds of orange flowers. One French *litre* of essence is said to require twenty-five thousand pounds of roses and sells for $450.

The two Iles de Lérins, in the offing, are now pleasure resorts. On St. Honorat, the outermost, is the Cistercian Monastery of Lérins which that saint founded in the fifth century, now an orphan asylum, having been disestablished. An old keep, among the buildings, was long used as a refuge from pirates. Ste. Marguerite, the inner and much larger island, is stocked with pheasants, has a picturesque surface, and commands an excellent view of Cannes and the grand environment of mountains. Upon its northern side is the chateau and prison-fort where the mysterious "Man with the Iron Mask" was confined for

eleven years until in 1698 he was taken to the Bastille in Paris, where he died in 1703. Marshal Bazaine, when court-martialled by the French in 1873 for the downfall of Metz, was sent here a prisoner, but managed to escape in August, 1874.

The beautiful Gulf Juan is east of Cannes, bounded by the verdant and villa-crowned Cape Antibes, projecting far into the sea. Napoleon, when he returned from Elba in 1815, landed in this Gulf, a column at Vallouris village marking it. Antibes, on the eastern side of the Cape, is a seaport created by Louis XIV, at the Roman town of Antipolis, Vauban having constructed its breakwater, and also the picturesque castle, Fort Carre, overlooking the harbor. The coast trends northeastward from Antibes to Nice, a dozen miles away, and the splendid esplanade of the Front de Mer, gives a magnificent outlook over the sea, as far as Nice, with the enclosing range of distant snow-covered Alps. The torrent of the Var rushes down a pretty gorge, the most important river of the Ligurian shore, and the eastern French boundary before Nice was annexed. Eastward of the Var, the widespreading Baie des Anges receives, through a broad and stony bed, a small stream called the Paillon. An encircling amphitheatre of hills rises to the northward, culminating in Mont Chauve, protecting the bay shores from the northern winds, and making a most delicious and equable winter climate. In this superb location is

Nice, the great resort of the Riviera, having a hundred thousand permanent population, swollen in the season by the vast numbers of invalids and tourists, who seek refuge from the inclemency of Northern Europe. The fashionable period begins with the Nice races, early in January, and closes with the Nice regatta in April, but the place is filled with visitors from October until May, though all vanish when summer comes. The culmination is during the carnival festivities preceding Lent. The temperature averages 60°, being 49° in winter and 56° in spring.

Marseilles colonists came to this shore, overpowered the Ligurians and named their settlement Nicæa. It was an active Roman seaport, suffered from Goths and Saracens, and afterward in the Provençal wars, ultimately becoming part of the kingdom of Sardinia, but in 1860 being annexed with Savoy to France. The Château, a steep and isolated limestone hill, rising over 300 feet, and extending back some distance from the shore, is the nucleus of the older town. Formerly there was a crowning castle, one of the strongest forts of this coast, but it was destroyed by the English in 1706, the ancient Tour Bellanda being a relic. Its plateau, now a pleasure ground, gives a fine outlook, the precipitous southern slope descending abruptly to the sea, and from the gusts of wind around it, being called the *Rauba Capeu,* or the "hat robber." The Quai du Midi extends westward from this hill along the sea front,

being prolonged toward the Var in the Promenade des Anglais. Famous sons of Nice, of whom the city is proud, were Marshal Massena, born in 1758, and Giuseppe Garibaldi, born in 1807.

At the eastern base of the Château hill, is the small harbor called Port Lympia, from a spring on its verge, the sea entrance being protected by breakwaters. Charles Felix, king of Sardinia, made the harbor, and his marble statue adorns the shore, under shadow of the hill. The older town is built all around, and on the eastern bank of the Paillon, but the original contracted lanes are replaced by better streets and buildings near the shore. The modern city extends westward, and the broad bed of the little river has been availed of as a site for most of the public resorts, the stream being completely covered in, while to the northward it is bordered by fine boulevards leading to the suburbs. Upon its bed are an extensive Casino, the Square Massena, with the Marshal's bronze statue, the Square Garibaldi with that hero's monument, and the Public Garden, stretching to the sea, and having the Centenary Monument, commemorating the first union of France with Nice in 1792. This region of elaborate artistic and horticultural development, is the chief resort of the hosts of visitors. From the Place Massena, known popularly as the "Stranger's Quarter," between the Casino and the Public Garden, the Rue Massena extends westward, prolonged as the Rue de

France. Where they join is the "Marble Cross" marking the spot where Pope Paul III brought together the Emperor Charles V and King Francis I, in 1538, to make a peace. Everywhere, luxuriant foliage and flowers adorn the streets and gardens. The Promenade des Anglais is a magnificent esplanade, fronting the newer town, curving with the shore and bordered by grand hotels and splendid villas, that have a fine outlook over the sea. It was built by the English residents in 1822 and later, to give work for the unemployed and hence the name.

The Roman town of Cemenelum was on the northern hills, and here are Roman remains, including an amphitheatre and baths, and a Temple of Apollo. There also was a Temple of Diana, and on its foundations the Capuchin monastery of Cimiez, the present name, was built in the sixteenth century. Now, the town is an aggregation of hotels and boarding houses. St. Pons monastery is up the Paillon, built on the spot where the Roman Senator St. Pontius was martyred in the third century. Farther northward is the magnificent outlook of Châteauneuf, elevated 2,300 feet, and now unoccupied, but said to have been originally constructed by the Nicians as a refuge from the barbarians. The huge Maritime Alps, back of Nice, rise in peaks 10,000 feet high, and are the Italian boundary.

The ponderous marble promontory of Montboron, elevated 600 feet, the termination of a mountain

ridge, separates the harbor of Nice from the land-locked roadstead of Villefranche, to the eastward, while the railroad connecting them goes through a tunnel in the marble a mile long. Montboron is strongly fortified, and behind it is the higher hill of Montalban with sixteenth century defences. Farther northward, the hill rises 1,200 feet as the Vinaigrier, so called from the sour grapes it produces. To the northeast, on Mont Gros, is the famous observatory, with one of the largest refracting telescopes in Europe, a thirty inch lens. The magnificent bay of Villefranche is the real harbor of Nice, and the mecca of all the navies, when their squadrons go to this attractive coast for evolutions during the fashionable season. Villefranche nestles deeply down amid the encircling hills, and off the quaint little town the squadrons execute their practice drills, all hands enjoying an almost perpetual picnic, marked by receptions and balls and the important frivolities of the social world. Thus this splendid district has a seductive charm for the pleasure seekers of all nations.

THE CORNICHE ROAD.

The Mediterranean coast eastward from Nice, fronts the Maritime Alps, and is formed of bold headlands and deeply indented bays, their surrounding precipitous hills rising in the background into towering mountains. Climbing the Montboron

ridge at the edge of the sea, begins the celebrated Corniche Road, from Nice to Genoa, the "Route of the Cornice." It is a splendid highway, mainly a broad ledge cut out of the rocky faces of the steep marble mountains, and running along but high above the beautiful shore. These cliffs slope precipitously down to the water, their luxuriant foliage contrasting with the deep blue of the Mediterranean. The route originally was little more than a mule path trod for centuries, but for military reasons Napoleon made it a great highway, so that his armies could turn the Alps and march into Italy. Thus was constructed the renowned Road of the Cornice, which the Riviera visitors so much admire. It winds a steep zigzag up the eastern heights from Nice, amid luxuriant vegetation, and looks down in retrospect upon the town and the stony Paillon ravine, and seaward far away toward the distant shores of Corsica. Then crossing the top of the promontory, it rounds the grand bay to the peninsula of St. Jean beyond, projecting far into the sea, and having on its eastern side another wide bay.

Here is Beaulieu, a newer resort of handsome villas, mostly on a promontory facing eastward toward the sea, and so balmy and even warm is the winter climate that ordinary hothouse plants flourish in the open air in January. One part of the settlement is so hot all winter that it is called "Little Africa." The late Lord Salisbury and the Grand

Duke Peter of Russia set the fashion for Beaulieu. Dark green olive trees flourish here throughout the year, living to a great age, and some are of enormous size. The Peninsula of St. Jean gets its name from a fishing village at the outer end, founded in the sixteenth century by the Knights of St. John who had been expelled from Rhodes. A narrow and crooked subsidiary peninsula projects eastward, St. Hospice, having an old chapel and statue of the Virgin. The famous road winds along above the sea, eastward from Beaulieu, reaching the village of Eze, on a steep hill of toilsome ascent. Here is a ruined fort, said to have been a Saracenic stronghold. Farther along, the rocks again project at Cap d'Ail, or "Garlic Point" where there are more pleasant villas. The Corniche road steadily climbs upward, reaching 1,800 feet elevation, and being somewhat back from the shore, upon the elevated slope, and here it comes to old Turbia, whence the visitor can look far across at Monaco, down by the shore, like a tiny model city on the edge of the deep blue sea. At Turbia, in picturesque ruin, is the Roman tower of Tropaca Augusti, built by Augustus, 6 B. C. to mark the boundary between Italy and Gaul, and the subjection of the Ligurians. The present tower in dilapidation, was built upon the other as a foundation, in the thirteenth century. A mountain railway brings the people up here from Monaco and Monte Carlo, to the Corniche road to

get the magnificent view over the sea and adjacent shores stretching all the way from Cannes to Ventimiglia. This view is universally admired, and Tennyson in the *Daisy,* telling the story of his wedding tour, wrote:

> What Roman strength Turbia showed
> In ruins by the mountain road;
> How like a gem beneath, the city
> Of little Monaco, basking, glowed!

MONACO AND MONTE CARLO.

The famous cliff of Monaco, a curious and circumscribed peninsula of solid rock, is thrust into the sea about nine miles east of Nice. It is little more than two miles long, and from one-third to two-thirds of a mile wide, being elevated 200 feet above the water, with an adjacent domain along the shore, making about six square miles of territory for the sovereign principality of Monaco, the little capital with its gardens and adornments being terraced on the rock, a miniature town defended by ancient ramparts. Standing anywhere in this diminutive kingdom, one can shoot a rifle ball over the boundary. Scions of the ancient Genoese house of Grimaldi rule it, Albert I being the Prince who heads the sovereign state, which issues its own coinage and postage stamps, and has a standing army of five generals and one hundred and twenty other officers and men. It also has a cathedral with a bishop, papal delegate, vicar

general, several monsignors and numerous priests. There are about sixteen thousand population, and a million and a half visitors will come in some seasons to see this place which has been described as "wonderful and wicked." The Prince owes allegiance to France, which purchased control, when Nice was annexed in 1860, paying $600,000. The situation is magnificent, the sun seeming almost always shining, the vegetation profuse, and sky and sea alike of the richest and deepest blue.

The Phœnicians first settled here, and then came Greeks from Marseilles, who built on the rock a temple to Hercules Monikos, meaning the "isolated home," whence the name of Monaco is derived. At first, the figure of Hercules was in its armorial bearings, but a monk was afterward substituted. The Saracens got control, and when their power waned, the first Grimaldi, Lord of Antibes, and his valiant son Giballin, drove them from the Ligurian shore, and the German Emperor Otho I, in gratitude, granted them the Lordship of Monaco. But their chivalry retrograded, and the rock became a nest of pirates, levying toll upon all commerce, a right not given up until the close of the eighteenth century. The legend of Monaco, for centuries has been: "Enthroned on a rock, I neither sow nor reap, yet I live long." It is said that Napoleon, when he landed on this coast, returning from Elba in 1815, encountered

Casino, Monte Carlo

Prince Honore IV of Monaco travelling toward his capital, and said to him: "Ha! you are here; you go to Monaco to be enthroned; I go to the Tuileries." Thus Monaco has always existed by preying upon others. The original Grimaldi has been described as more of a pirate than a prince, and for seven centuries, his successors had their galleys roaming the sea, their income arising from the tolls and ransoms of vessels. Their rocky home growing little food, these adventurers had a varied existence, being often in dire distress. Finally, Genoa, Nice and Marseilles united in opposing their piracies and compelled cessation. For over a half century, the Grimaldis waited half starved on their rock for something to turn up, and it came in 1860, when the noted M. Blanc, driven from Homburg with his gaming tables, found an asylum and renewed fortune at Monaco. He got a concession, running until 1913, agreeing to support financially the Prince and his Government, built his gambling palace of Monte Carlo upon the rocky slopes of the Spélugues, a short distance eastward on the shore, and converted the place into a paradise. The Prince devoted most of his enlarged revenues to the decoration of his old capital, restored the palace, built the sumptuous cathedral and various beneficent structures. Thus Monaco still lives, the world yet contributing to the Grimaldis, and after 1913 some other method of doing this will

probably be devised. Every new attraction is availed of, and in 1909 the modern quay of the little port was fitted up for aviators.

Monaco proper, the older town, is situated picturesquely on the promontory, while the new settlement is around the bay, a much larger town of huge hotels and villas, stretching along the shore to and beyond the Monte Carlo Casino. Everywhere are orange groves and luxuriant gardens, while behind the town and promontory rise the towering heights of the Mont Tete de Chien, elevated 1,900 feet, and the Mont de la Justice. Thus the background is magnificently terraced up to Turbia and the Corniche Road, the mountain railway climbing up there along the slope of a pretty ravine. Upon the Monaco rock, the Prince's palace occupies the landward end, with the town to the southward. This palace has crenellated towers, but has been modernized, and there is a splendid view from the parapet. The interior is superbly decorated, the frescoes representing the feats of Hercules and also of the Grimaldis, with a triumphal procession of Bacchus by Caravaggio. The Duke of York's suite of rooms, is named for the brother of George III, who died here. In the palace square are ancient guns presented by Louis XIV, and here the entire standing army is regularly mustered in review, for the delectation of the visitors — the soldiers in the Grimaldi colors, light blue with red and white facings, and the gendarmes in dark

blue with cocked hats and swords. The old town is a collection of quaint buildings on narrow and crooked streets, with solid ramparts crowning the rock, numerous churches and shrines, the noble cathedral, and a fine road winding down the eastern slopes to the settlement and harbor below. Monaco is regarded as the cleanest and best policed city of the Riviera.

Gambling is prohibited by law in Monaco, and the law is strictly enforced, for the good reason that the right is sold for a concession which keeps the whole government in operation. About a mile east of the capital is the precipitous slope of the flat-headed cape where most of the old-time pirates dwelt, and called from time immemorial the Spélugues, or the "Plain of the Robbers." It then was a mass of barren rocks, but a road was opened to Mentone, and convict labor employed to carry soil thither, and on it in 1858 the Casino was begun, supervised by Charles Garnier from Paris, and it has been developed with great magnificence. It was named Monte Carlo from the Prince of that name, Charles III, who for twenty-five years before his death in 1889 was blind, living most of the time a recluse. To the gaming establishment, thus set up, came the rich, the gay and the frivolous from all the world. It is a magnificent establishment, mounted high on the rock, the beautiful terrace and gardens having a superb outlook over the sea. All around and be-

hind, on the shore, the eminences and slopes, are hotels and villas, mostly white structures embosomed in verdure, and having to the northward the enclosing border of the distant gray Alpine peaks.

When M. Blanc died he left a fortune of $12,000,000, and in November, 1907, his granddaughter and heiress, Princess Marie Bonaparte, married Prince George, the second son of the King of Greece, then the high Commissioner of the European Powers in Crete. The Casino is now owned by a corporation with $3,000,000 capital, the shares being listed on the Paris Bourse. No Monaco inhabitant can gamble, only strangers being admitted to the gaming tables. The railway brings the visitors to the foot of the rock, and they mount to the terrace and gardens, by a grand stairway or an excellent road. Admission is free, but the stranger must present his card; the games played are "Roulette" and "Trente et Quarante"; and the stakes are limited — in the former not less than 5 francs nor more than 6,000 francs, and 20 to 12,000 francs in the latter. The gaming is profitable for the bank, despite the expense of keeping up the establishment. The corporation owning the Casino is the "Societé des Bains de Mer et Cercle Etrangers," which is translated to mean the "Society of Sea Bathing and Foreigners' Club." In 1905 it did business producing $8,000,000 revenues and expended $2,400,000, so that $5,600,000 profit

remained. The shares are $100 par, quoted up to $700 at times and paying dividends of $40 to $50. There are no taxes in Monaco as this company pays all expenses of government, provides free schools, fire protection, courts, light, water and sewage, supports the whole official staff, army, gendarmes and police, gives $50,000 to the manager of the theatre, a similar amount to the orchestra, and about $300,000 to the croupiers and other employes of the Casino. It does all the policing and cleaning of the town, supports the jail, and makes all the improvements. The Prince gets $350,000 annual "rent," the President of the Casino $20,000, the Director General $8,000, and the other Directors $4,000. The army and court expenses are provided for by $125,000 additional, $500,000 are devoted to amusements, and to keep up the buildings and gardens costs $150,000 more. There are over sixty-five hotels in the place, but the visitors support all these, and building lots sell at prices rivalling Broadway and Fifth Avenue in New York, or Broad and Chestnut Streets in Philadelphia.

The "Societé" has its official newspaper organ, the "Rouge et Noir," reporting the doings of the gay world at Monte Carlo, and it also gives a "subvention to the press" for keeping quiet, of $100,000 to $150,000 annually, out of which one Paris journal is said to draw about $15,000. Pensions are also

paid once rich men who lost their fortunes at the tables, and to people who go broke and cannot get home unless helped. One Englishman is referred to, who lost $400,000 and gets $50 a week. There also is a mysterious tale at Monaco of an "etranger" who came from Chicago, played all day, won $100,000, and then got out of town, giving them no chance to win back. The people who come to Monaco with schemes to "break the bank" are myriad, but somehow they do not do it. No finer place exists in the world, for the "Societé" knows it must keep up the attractions. All this goes along in a region of surpassing beauty, which Tennyson years ago described as "a gem, basking, glowing in the sunlight." The buildings and grounds are embellished in every way. There are reading and conversation rooms, a picture gallery, winter garden, tennis courts and all kinds of amusements, while outside the Casino entrance are imposing statues of Music, executed by Sara Bernhardt and Dancing by Gustave Doré. The gaming proceeds amid the most gorgeous beauties of nature, developed in the richest glow of light and color, with the scent of magnolias and orange blossoms, plashing fountains, the sound of delicious music, and the gentle murmur of the deep blue Mediterranean down by the curving shore. This paradise has been well described as the Garden of Eden of the modern world, but the thought of how it is maintained gives a forceful reminder of Poe's "City in the Sea":

Gambling Room, Casino, Monte Carlo.

—— When, amid no earthly moans
Down, down, that town shall settle hence,
Hell, rising from a thousand thrones,
Shall do it reverence.

MENTONE TO SAN REMO.

Cape Martin is another bold promontory east of Monte Carlo, through which the railway passes in a tunnel, while the Corniche Road, approaching nearer the sea, zigzags over the top. Here is Roccabruna, surrounded by orange and lemon groves, and having high above a ruined castle. Fine old trees cover the cape, making a park for the hotel on its extremity, a signal tower being on its highest point, with the remains of an ancient convent. The Villa Cyrnos, overlooking the sea from the western slope, is one of the homes of Empress Eugenie. Another ridge projects to the eastward, with a gentle bay on either hand, and here upon the summit and its slopes is Mentone, the little harbor having a protective breakwater with a lighthouse. Small torrents have cut down picturesque ravines in the enclosing hills, and the beauty of the situation has made another popular Riviera resort, embosomed in lemon and orange groves, with figs and olives, and sometimes selling a crop of forty million lemons. This place was originally held by the Grimaldis, but became independent in 1848, and now belongs to France. Steep and tortuous streets on the top and sides of the ridge, make the older town, with St. Michael's Church con-

spicuous, reconstructed after its partial ruin by the earthquake of 1887. The magnificent tropical gardens, covering sixty acres, on the slopes stretching down to the sea, are the finest on the Riviera. Along the bay east of the ridge, is the Garavan, and here are the partly destroyed grottoes of the Rochers-Rouges, or the "Red Rocks," where prehistoric skeletons were found that are exhibited in the Hotel de Ville.

The torrent of St. Louis rushes down into this East bay, the Corniche Road being carried over the gorge by an airy bridge more than 200 feet high. This torrent is the boundary between France and Italy, and beyond it, the railway train goes through the marble ridges by repeated tunnels, with the famous road mounting by successive inclines and windings over their tops, and the Italian fortress of Ventimiglia is reached where the customs officers appear. Its name is a corruption of its Roman title, Albium Intermilium, when it was the ancient capital of the Ligurian tribe, the Intermelii. Two streams, the Roya and Neuri, flow over wide stony beds, insignificant during most of the year, but raging torrents when the mountain snows are melting, and Ventimiglia grandly covers the hill top rising from their ravines, the cathedral crowning the summit, and on a commanding height beyond being the ruins of the old Castle d'Appio, once their chief defence.

Bordighera, famous for its palms, is three miles

eastward. It proudly crowns the rocky elevation of the Capo di Ampeglio, its memory being of the time when it was a republic, and ruled several subject towns. Now it is a favorite winter resort, and its hotels and villas spread along the shore below the heights, excelling in flower gardens and date palms, their branches, supplied to the churches for Palm Sunday, being its largest product. Some of these palm trees are a thousand years old, and there are more of them in these magnificent groves than in Judea, where they were so numerous that they became the national emblem. The palm leaves annually blessed at St. Peter's in Rome are supplied from here, this service originating when the obelisk of Heliopolis was brought from Egypt to Rome in 1586, by Pope Sixtus V, to be erected in the Piazza of St. Peter's. A great crowd gathered, and silence was enjoined under penalty of death. At the critical moment when being swung in place, the ropes were strained and it was feared the obelisk would fall. Then a sailor in the crowd — Bresca of San Remo — disregarding the penalty, shouted "*Acqua alle funi*"—"Wet the ropes!" This was done, the ropes contracted, and the monolith was saved and placed in its present position. The bold sailor was pardoned, and asked what reward he wished. He desired to provide the Easter palms at Rome, and the privilege is still held by his descendants at Bordighera.

Beyond the villa-bordered bay of Ospedaletti, rises the high promontory of Cape Nero, having another beautiful bay on the farther side. Here, between the ravines of two mountain streams, is San Remo, the special refuge of the most delicate invalid, as it has the balmiest climate on this favored shore. Olive groves, with houses embosomed, cover the valleys and lower slopes, and forests and mountain flora are above, the ranges rising in the background to about 8,000 feet. The old town is on the hill between the torrents, the narrow and stair-like streets descending the slopes, with tall houses, some painted in gay colors, having flying buttresses and arched gateways, while flights of steps abound. High above some of the streets, the tops of the houses are connected by masonry arches, designed to keep them from being thrown down by earthquakes, frequent on this coast. The newer town along the shore and on the enclosing hills, is all the growth of the last half-century. Its gorgeous modern street, the Via Vittorio Emanuele, is resplendent with shops. The small harbor has a protecting breakwater, and on the hill, the landmark for the mariner, is the white and dome-crowned church of Madonna della Costa, the venerated shrine of the ancient town.

San Remo was the Grecian Leucothea, and the Roman Matistra, being early Christianized by St.

Ormisdas and St. Sirus, its Cathedral of St. Siro being named after the latter. The barbarians got it, and then the Saracens, but when they were expelled from Liguria, the place took the name of San Romolo from a sixth century bishop, his saint's day, October 13th, being its special fete. The name finally was changed to San Remo, and the Genoese got possession in the eighteenth century. Proud of their descent from the ancient Ligurians, the people are patriotic, and though many emigrate to seek fortunes elsewhere, they usually return to end their days on these sunny shores. Several villas, adorned with the gayest colors, have been built by townsmen who got a competence in far-away America. To the eastward is the high, foliage-covered promontory of Capo Verde, surmounted by the conspicuous church of the Madonna della Guardia, seen from afar, the railroad being tunnelled through the marble cliff beneath. Beyond, the shore line trends to the northeast and olive groves are everywhere, the oils being the chief export. This district was devastated by earthquakes during the last century, the worst one in 1887. Back of the cape, up a broadening valley, and on an eminence, are the ruins of Bussana, then destroyed. The coast has at intervals low and ponderous towers, built a thousand years ago, for defence against the Saracens, and some are dwellings now. Numerous torrents flow out through wide and stony ravines,

and alongside one is San Lorenzo, on a cliff beside the sea, with its tall campanile tower, of which Tennyson wrote in the *Daisy:*

> What slender campanilii grew
> By bays, the peacock's neck in hue,
> While here and there, on sandy beaches,
> A milk-belled amaryllis blew!

Beyond, and each with a busy harbor, are Porto Maurizio and Oneglia, which export the finest olive oils, the entire country abounding in olive groves. The rude Mediterranean coasters move about, with their picturesque lateen sails, and manned by dark-eyed swarthy sailors, apparently the same now as during remote centuries. Oneglia was the birthplace in 1466 of the famous Genoese admiral Andrea Doria, who served the French king Francis I, but afterward, in 1528, delivered Genoa from the French rule. He then assembled the populace, and sacrificing personal ambition, recommended the formation of the Genoese republic, which continued till 1815. Doria was made Censor for life, with the title of "Father and Liberator of his Country." He conducted many campaigns, conquered the pirates, defeated the Turks, and after a very active life, made his last voyage when 85 years old. Doria was the great Christian champion on the Mediterranean, and the unrelenting foe of the Moslem. In 1556, at the age of 90, he resigned all his offices, and died in 1560

aged 94. Ariosto sang his praises, and he passed his later years in and near Genoa.

APPROACHING GENOA.

The magnificent curve of the Gulf of Genoa, in its enclosure of mountains, grandly rounding from the northwest to the southeast, presents a most beautiful view over the Mediterranean. Here is Alassio, named from the daughter of the Emperor Otho, who fled here to be near her chosen lover. Albenga, beyond, was the Roman Albingaunum, and has the ruins of a bridge built by Hadrian, which now spans only a dry meadow where then was a stream. Its noble cathedral, with impressive façade and crowning towers, stands on the site of a heathen temple. There are unhealthy marshes here, so that the expression is used of the "Albenga face," for anyone whose appearance is commiserated. In all the villages along this shore are churches and hospitals built by the generosity of the Dorias. Twenty-seven miles from Genoa is Savona, the largest town in this part of the Riviera, having a handsome cathedral and a busy harbor, protected by a fort. Nearby, the torrent Senscobbia flows out with Abbissola on its shores, where Popes Sixtus IV and Julius II were born. Seven miles farther, among the rocks, are the shipyards of Varrazze, building vessels for Genoa, about in the same way as for centuries. In these shipyards Columbus is said to have first been inspired to become

a sailor. At Cogoletto, adjacent, his birthplace is claimed, and a monument was erected in 1888, though this claim is probably erroneous, as he is believed to have been born in Genoa, about 1426. When he was very young, however, the family removed here. The old house, claimed as his birthplace, bears this inscription:

> Travellers, stop at this house!
> It was here that Christopher Columbus,
> The greatest man in the world,
> First saw the light,
> Here in this humble house!
> There was only one world:
> This man spoke and there were two.

A noisy torrent rushes through the village, and serpentine rocks environ it. Tennyson was here, and in the *Daisy* pays his devoirs to the Columbian memory:

> Now, pacing mute by ocean's rim;
> Till in a narrow street and dim,
> I stayed the wheels at Cogoletto,
> And drank, and loyally drank, to him.

The Milk River, the Fiume di Lette, pours wildly down the marble hills, and out through the opening is got a splendid view of the quays and palaces of "Genova La Superba," seen far over the water, and up the heights behind. We are practically in the city suburbs, and come at Pegli to about the last resort on this noble Riviera shore, where the winter sojourner lingers. Luxurious villas are dotted on the Pegli hills in lovely grounds, originally homes of the

Grimaldis, the Dorias, the Pallivicini and others, who retired here from the city. The decoration is in the florid Italian fashion, and the landscape gardening shows that the aim in this warm climate, is to create luxuriant shade and ample moisture, with fountains of running waters amid the delicious vegetation. Here is the famous Villa Doria where the Admiral passed the evening of his days, its grounds stretching down to the border of the sea, and displaying most lovely views of mountain, coast and city. A castle crowns the summit of the Villa Pallivicini, the surface decorations representing a siege, with a mausoleum for the fallen heroes.

THE CHIEF SEAPORT OF ITALY.

The grand semicircular Bay of Genoa is thrust far up from the Ligurian Sea, into the very bosom of the Alps. At the apex is the little harbor which made the port of Genoa, and the noble shores stretching for miles away toward the southwest and southeast, on either side of the famous city, look out upon each other, and are known as the Riviera di Ponente, or the "setting sun," toward the west; and the Riviera di Levante, the "rising sun," toward the east. The approach to Genoa from the sea is magnificent. The original little port has been extended by artificial breakwaters, and is crowded with vessels, while along the narrow strip of comparatively level land upon the shore, the city spreads from the

noble lighthouse on the west, to the ravine of the Bisagno on the east. From this strip, there rises on the hill slopes a mass of marble palaces, gardens, streets and houses, stretching far away to the culminating point of the "Spur" on Monte Peraldo, elevated 1,650 feet, where is the great fort of Sperone. The higher distant Alps form the splendid background to this noble view, which is enhanced by the many palaces, erected on numerous eminences by the Genoese patricians during centuries of commercial success. The city is the chief port of Italy and the queen of the Riviera, controlling the commerce of the greater part of the kingdom, and has over 250,000 population. We are told that while other Italian cities devoted themselves to art and intrigue, the whole energy of the Genoese was concentrated on commerce and the pursuit of gain. Several times both the city and the port have been enlarged, and it is now regarded as an impregnable fortress, a line of ramparts and defensive works extending for ten miles, from the lighthouse point on the west around to the ravine of the Bisagno, all the important parts defended by batteries, and there being about a dozen detached forts. The harbor has been repeatedly enlarged by new breakwaters, and there are now going on works at a cost of $15,000,000 to give more dock space, which were formally begun by King Victor Emmanuel in October, 1905, in the presence of a half million people and forty-three warships

from all nations. The great lighthouse which guides into the port, stands on a rocky headland, its lantern elevated 384 feet and showing twenty miles at sea.

When Genoa began, or by whom it was first settled, no one now knows. The name seems to have been derived from the curving shore resembling the bended-knee — *genu*. It was Roman, and the chief town of the Ligurian shore, and for centuries afterward it maintained itself against various barbarians and the Saracens, finally coming into a great rivalry with Pisa, which ended in the Genoese victory of 1286, from which Pisa never recovered, but Venice defeated Genoa in 1380. The city acquired control of much of the Mediterranean commerce, and particularly with the Levant, from which great wealth was accumulated. Disputes about this treasure and trade, made much factional strife between the rival patricians, who built their sumptuous marble palaces and quarrelled almost all the time, until Doria secured the organization of the Republic, which represented Genoa's most successful period and subsisted until the French Revolution. At times, however, the city was captured and held by both the French and the Austrians, but its independence finally fell, after the battle of Marengo in 1800, when the French took it. In 1815 it became part of Sardinia, and afterward joined the kingdom of Italy. The city, besides Columbus, has two heroes — the boy Balilla, who in 1748, when aged fifteen years, threw a stone at an

Austrian soldier, which began a popular uprising that ended in driving the Austrians out, and Joseph Mazzini, who had so much to do with the Italian revolution in 1848, and died at Pisa in 1872, after a life spent in efforts to revive Italian independence and the Genoese republic.

The older Genoa is a picturesque medley of narrow streets and alleys, with stairways climbing the steeper slopes, and bridges spanning the valleys. Large portions are inaccessible to ordinary carriages, and some of the more important streets have scant room for traffic, porters and chairs taking the place of cabs, and goods being carried on the backs of mules. Some wider streets have been opened through the older town, while the newer sections of course have modern improvements, with fine avenues and attractive public promenades and gardens. From near the harbor, the busy street of San Lorenzo goes through the city southeast to the famous Cathedral of San Lorenzo, founded in the tenth century, and repeatedly restored and enlarged. The lower façade is built of alternate courses of black and white marble, and while intended to have two towers, only one has been completed. The legend says that the foundation of the first church on this site was contemporary with St. Lawrence himself. The interior contains sixteen Corinthian columns, that were built in the original structure in the twelfth century. In one of the finest of the chapels, erected in the fif-

teenth century, and now illumined by electric lights, are the relics of John the Baptist, and it is said that on only one day in the year are women permitted to enter this chapel, because it was a woman, Salome, the daughter of Herodias, who procured his death. These relics, which were brought here from Palestine during the Crusades, were contained in a beautifully carved sarcophagus of alabaster, about four feet long. In explanation of this, it is said that he was of small stature, and that the head was not recovered. This sarcophagus has been in the church from its beginning, nearly a thousand years ago, and stands upon a pedestal at the side of the chapel, the carvings upon it representing the baptism of Jesus and incidents in the Baptist's career. The relics, however, are now enclosed in a case of lead, and deposited in a cavity chiseled in a large marble block over the altar. This case is brought out once a year, on the Saint's day, and carried in solemn procession around the church. There are relics of John the Baptist elsewhere, a forearm at Madrid, parts of a hand at St. Petersburg, and several fingers in Rome.

The great treasure of San Lorenzo is in the sacristy, the Sacra Catino, or the Holy Grail. This was the wonder working cup, the legend being that it was brought by Joseph of Arimathea to Britain, a shallow bowl from which Jesus and his disciples partook of the Paschal Lamb at the Last Supper. Joseph after the crucifixion, having obtained leave from Pilate to

take down the body from the cross, went first to the upper room where the supper was served and there found this vessel; and then as he took down the body he received into it many drops of blood still issuing from the wounds in the hands, feet and side. The treasure was lost, and was long sought and fought for by King Arthur and his Knights of the Round Table. On account of the sins of men it was said to have vanished from Britain, and "to achieve the Holy Grail," that is to find or see it, became the height of chivalrous ambition, but the legend told that among all Arthur's knights, only one, Sir Galahad, the son of Lancelot, was sufficiently pure in heart to be favored with the sublime vision. The cup was finally discovered at Cæsarea in Palestine, and captured by the Genoese, who brought it here in 1101, and it was supposed to be made out of a large emerald about four inches high, and held the contents of a claret glass. Napoleon took it to Paris, where it was accidentally broken, and then it was found to be only of glass. It is octagonal in shape, was bound together skilfully and returned to Genoa in 1822; and is one of the most sacred relics of the Catholic Church. Paganini, the violinist, was a native of Genoa, and sang in the choir of San Lorenzo, his name being carved on a chapel seat.

There are a hundred churches in Genoa, and the oldest was St. Ambrose and St. Peter, near the cathedral, said to have been founded in the sixth century,

and now replaced by the Jesuit Church of St. Ambrozio, built in the sixteenth century. San Siro, the original cathedral, was built by the Benedictines in the eleventh century, and rebuilt in the sixteenth. The Annunziata is one of the largest and wealthiest Genoese churches, a huge cuneiform structure with a fine dome. Santa Maria della Vigne dates from the ninth century, and has a thirteenth century campanile, most of the present structure having been erected in the sixteenth century. Santo Stefano, dating from the tenth century, also has its ancient campanile, but has been several times rebuilt, mostly in the fourteenth century. It contains, above the high altar, Romono's famous painting of the Stoning of Stephen, carried off to Paris by Napoleon in 1811, but restored to the Church in 1815. San Matteo, a small Gothic structure, was the church of the Doria family of which it contains many memorials, the façade bearing inscriptions in their honor. Montorsoli, the sculptor of Florence, who was brought to Genoa by Andrea Doria, executed the sculptures with which it is adorned, and also Doria's tomb, which is in the crypt below the high altar, his sword presented by the Pope being hung above. Doria's statue, in front of the church, was greatly mutilated in the Revolution of 1797.

On the Piazza Acquaverde, in the western part of the city, and embosomed in palm trees, is the marble statue of Columbus, almost the first object greeting

the visitor upon leaving the railway station. America kneels at his feet, and the pedestal is adorned with ships' prows, the surrounding allegorical figures representing Religion, Science, Strength and Wisdom, having between them reliefs of the discoverer's history. To the westward is the Palace of Doria, presented to him by the city. It is a long and spacious structure, and in the court is a large fountain with a statue of Doria as Neptune. The Ducal Palace, which was the residence of the Genoese doges, is on the Piazzo Nuevo to which the street of San Lorenzo leads. It was completely rebuilt after a fire in the eighteenth century, and now contains the government offices and law courts. The marble palaces of the Genoese patricians are famous for their sumptuous architecture and artistic collections. The Palazzo Rosso (the Red) was the home of the Duke of Galliera, the chief modern ship owner of Genoa, and was presented to the city in 1874. It contains a fine art collection. Opposite, and named by way of contrast, is the Palazzo Bianco (the White) of the sixteenth century, bequeathed to the city in 1889, by the Duchess of Galliera and now an attractive museum. The Municipal Palace was also built in the sixteenth century, for the Dukes of Turin, and is on an inclined site to which its handsome staircase and court have been skilfully adapted. In the court is a statue of Mazzini, and the vestibule is adorned with frescoes illustrating the Doge Grimaldi. Its

chief relic is a bronze tablet of the second century, recording a judgment in a dispute between Genoa and a neighboring castle; this tablet was not discovered until the sixteenth century. There are also the papers of Columbus, his portrait in mosaic, and a famous violin of Paganini — a Guarneri. The Royal Palace, built in the seventeenth century for the Durazzo family, was acquired by Victor Emmanuel in 1817 and greatly improved afterward. It stands in a commanding position, and from the balconies and terrace gives a good view over the city and harbor. There are scores of marble palaces dotted all about the city which add splendor to the scene. On the hills which rise at the back of Genoa, there has been laid out a series of fine streets, curving in and out with the ravines and cliffs, known as the Via di Circonvallazione, which provides one of the most superb drives in this charming region.

While the city has many memorials of Columbus, yet it is not positively known that he was born here. The honor is claimed for a small house in Via Dritto del Ponticello, one of the narrow streets of the older town, this house having been occupied by his parents when he was a child. A Latin tablet over the door says: "No house better deserves an inscription. This is the paternal home of Christopher Columbus wherein he passed his infancy and youth." In 1473, Columbus signed a deed relinquishing his claim upon this house in favor of his brothers, and in his will he

wrote, "I was born in Genoa." When he sailed on his last voyage in 1502, he deposited all his papers with the famous Genoese Bank of St. George, which was then regarded much as the Bank of England is to-day, in the estimate of the world of business and commerce. This bank was founded in 1407, but in 1740 the Austrians, and again in 1800 the French, seized its treasure, and it ceased to exist. This was the first bank that issued circulating notes. The bank building still stands in the older town, having been used for the Custom House, and its hall is now occupied by a sumptuous collection of statues of eminent Genoese. When the Bank went out, the Columbus papers were sent to the Municipal Palace, where Napoleon found them, and they were taken to Paris. They were returned in 1827.

The great Genoese cemetery is the Campo Santo, occupying a spacious site on the northern slope of the Bisagno ravine back of the city, and is regarded as one of the finest in existence. This "Sacred Camp" contains a wonderful collection of costly monuments, the ambition of the people being to be buried here. It is surrounded by brick walls twenty to thirty feet high, and arranged inside for oven-like vaults, containing rows of cells, which admit coffins, and are sealed with marble slabs when filled. These cells can be bought or rented, but if the rent is not promptly paid, the bodies are cast out and buried in the potters' field. The custom is to purchase a group of

these vaults, and place in front a common monument, and the rivalry in decoration has brought into the Campo Santo a wonderful display of statuary. Mazzini's tomb is in this cemetery, but the one most noticed contains the life-size figure of an old woman, who for over forty years sold fruit and cakes in the city. She had no family, and long before her death, determined she would be buried in the Campo Santo, and have a monument as good as the best of them. She saved her money and employed the most noted Genoese sculptor, who made a faithful reproduction of the lady in the garb she wore when selling her wares, selecting before her death and buying one of the best locations for her tomb. In the Protestant Cemetery, up on the hills, is buried James Smithson, who died in Genoa in 1829, the Englishman who bequeathed his fortune to the United States to found the Smithsonian Institution at Washington.

From the high hills which so grandly environ Genoa, the visitor looks down at the town and far away over the wonderful expanse of the Mediterranean. It seems subdued and quiet under the brilliant sun, or broken into gentle ripples by the zephyrs, and what Æschylus called its "multitudinous smile." Its glorious outlook and wonderful history recall Byron's apostrophe to the great sea in *Childe Harold:*

> **Thy shores are empires, changed in all save thee —**
> **Assyria, Greece, Rome, Carthage, what are they?**

Thy waters washed them power while they were free,
And many a tyrant since; their shores obey
The stranger, slave or savage; their decay
Has dried up realms to deserts. Not so thou,
Unchangeable, save to thy wild wave's play;
Time writes no wrinkle on thy azure brow;
Such as creation's dawn beheld, thou rollest now.

ISLANDS OF THE SEA

VI

ISLANDS OF THE SEA

Balearic Archipelago—Iviza—Formentera—Majorca—Palma—Miramar—Soller—Minorca—the Talayets—Port Mahon—Cabrera — Corsica — Monte Rotondo—Ajaccio—Napoleon—Corte—Paoli—Bastia—Bonifacio — Caprera — Garibaldi — Sardinia—the Brucu Spina—Terranova—the Nuraghi—Sassari—Porto Torres—Macomer—the Campidano—Oristano—Iglesias—San Pietro—San Antioco—Cagliari—Nora—Malta—Calypso—the Knights of Malta—Valetta—Citto Vechia—St. Paul's Bay—Comino—Gozzo—Elba—Porto Ferrajo—Napoleon—Porto Longone—Capreja—Gorgona—Pianosa—Monte Cristo—Giglio—Ventatene—Procida—Ischia—the Epomeo—Casamicciola—Lacco—Forio—Capri—the Blue Grotto.

THE BALEARIC ARCHIPELAGO.

These leafy isles upon the ocean thrown,
Like studs of emerald o'er a silver zone.

Within the spacious boundaries of the Mediterranean are various islands long known to fame. From the protruding buttress cliffs on the eastern coast of Spain, Capes San Antonio and San Martin, the rocky strata of the Andalusian mountain system, extend far northeastward in submarine ridges. These reappear above the surface in the islands of the Balearic archipelago, where the highest summit in Minorca rises to more than five thousand feet

elevation. There are two groups of *Las Islas Baleares,* the name being derived from a Greek word, meaning "to throw," and thus anciently designating them as "the islands of the throwers," referring to the skill of their warriors as slingers. Early settlements were made by the Phœnicians and Carthaginians, and during the varying fortunes of the Punic Wars, the people served as slingers, in the armies both of Carthage and of Rome. The island group nearest the Spanish coast was the Pityusæ, the "isles of pines," named from the dense forest growth upon their shores. The chief of these was the Carthaginian Ebusus, about sixty miles from Cape San Martin, now known as Iviza, a mountainous oval, about twenty-five miles long and thirteen miles wide in the broadest part, the ridge stretching through it northeastwardly and culminating in the summit of the Atalayasa, rising 1,560 feet. Upon the southeastern shore is the pleasant little port of Iviza, its most prominent structures, the old castle and cathedral, picturesquely fronting a background of steep green hills. To the southward, a short distance, is the comparatively flat and fertile island of Formentera, its present name coming from the prolific production of wheat. This was the Ophiusa of the Greeks, and the Roman Celubrario. It is shaped not unlike a rather lean mutton chop, and its coasts enclose nearly forty square miles. Farther northeast is the second and largest Balearic group,

its chief island, about fifty miles from Iviza, being Majorca, or Mallorca, a trapezoid, with its angles directed toward the cardinal points of the compass, and its longest diagonal being sixty miles. Twenty-seven miles farther northeast is Minorca, or Menorca, covering about three hundred square miles of surface. As their names imply, these are the major and minor islands of the greater group.

These were ancient regions. When the Carthaginians came, they founded Port Mahon, the chief town of Minorca, its founder, whose name is thus reproduced, being Mago, the brother of Hannibal. The subsequent Roman conquest was by Cæcilius Metellus, who was made the Consul, and surnamed Balearicus, 123 B. C. He founded on Majorca, its chief city on the western coast, Palma, the "palm of victory," and on the northern shore, Pollentia, "the powerful," now the small but pretty town on its beautiful bay of Pollensa. The Vandals captured the islands, then the Visigoths, and finally the Moors, Charlemagne, however, being in possession for a few years. Jaime I of Aragon, the "Conqueror," expelled the Moors in 1230, and after his death for about seventy years, the archipelago formed the Kingdom of Majorca, but was united with Aragon in the fourteenth century. These islands have a delightful climate, and are quite fertile, but agriculture is primitive, and their breeding of swine and mules is a considerable industry. They export

fruit, wines, marble and salt. The people, numbering nearly 400,000, are a Catalan race, and speak a dialect composed of that language and other words borrowed from the varied tongues of their many masters at different periods.

The northwestern coast of Majorca is an array of precipitous cliffs, formed by the long mountain ridge that stretches from the western to the northeastern extremity of the island, with many noble precipices and projecting capes, rising in numerous summits of which the highest is the Puig de Torrella, 4,740 feet, about the centre of the range. To the east and south of this great backbone, the surface is comparatively level, though broken by isolated peaks, and the coasts on that side are mostly low, and slope away from the interior table lands. The mountains are of limestone, and their cliffs, ravines and valleys present beautiful scenery. The steamer coming from Barcelona approaches the precipitous northwestern coast, surmounted by its many ancient watch-towers, and rounds the cliffs at the western extremity of the island, finally entering the superb and deeply indented bay of Palma, on the southwestern coast. This bay is thrust for twelve miles into the land, and has at its head, picturesquely spread over the top and on the sides and base of a hill, the capital city of the province, ancient Palma, where there are some seventy thousand people. It is a commercial and manufacturing community.

and as the steamer approaches, the noble cathedral on the eastern side of the harbor dominates the view, while adjoining is the venerable castle of the Almudaina, which represents, though in some decadence, the old time royal glory of the kingdom of Majorca. Jetties protect the little harbor, and on the quay is the Gothic sandstone Lonja, with Moorish castellated top and corner turrets, which was the Exchange in former days. The cathedral was begun by King Jaime I of Aragon in 1230, and was nearly two centuries building, its golden-brown sandstone flying arches, towers and elaborate façade being impressive. It is nearly three hundred and sixty feet long and one hundred and eighty-five feet wide, the nave being one hundred and forty feet high and about sixty-three feet wide at the vaulting, one of the largest spans existing. Slender columns, seven on either side, separate the nave from the wide aisles, on the outside of which are rows of chapels. In the chief chapel behind the high altar, enclosed in a black marble sarcophagus, are the remains of King Jaime II, who died in 1311. Bishop Gil Munoz, who died in 1424, and was elected the antipope Clement VIII, is also interred in the cathedral. There is an elaborate candelabra in the treasury, which cost $30,000. From the plaza in front of the cathedral, there is a magnificent view over the harbor and the distant sea. Among the interesting private houses in Palma is the Casa Bonaparte, that

famous family tracing descent from Hugh Bonaparte, a native here in the fifteenth century, who is said to have been a governor of Corsica.

The fertile *Huerta* of Palma, watered by various small streams coming down out of the mountains, stretches northward from the city; and among the enclosing hills, with a grand view over the sea to the northwest, is the splendid domain of Miramar, improved in the later nineteenth century by the Austrian Archduke Louis Salvator for a winter retreat. Adjacent is the old and ruined Carthusian convent of Valldemosa, where George Sand came in 1838 and occupied a cell. Some distance northeastward is the beautiful vale of Soller, opening out upon the sea and having at its entrance, embosomed in orange groves, the little town of Soller, which has a good deal of trade with the French and Spanish Mediterranean ports in wines, fruits and olive oil. The great Puig de Torella, the highest peak of Majorca, rises to the eastward of the town and gives it a noble background.

Minorca island, to the northeastward, has a generally flat surface in the southern part, but rises irregularly toward the centre, where is the highest summit of the archipelago, Mount El Toro, the name evidently derived from the Arabic *Tor* meaning a height, though the people have a legend that it comes from the Spanish *toro,* a bull. This peak reaches an altitude of 5,250 feet. To the outer world,

Minorca is chiefly known from its admirable harbor of Port Mahon, and its mysterious prehistoric monuments called the talayets. The various small holdings of land are separated by stone walls, and these with the many windmills, are a characteristic feature of the surface. There rise everywhere also the curious talayets, gloomy, tower-like buildings, having the entrance far above the ground, which are sometimes fifty feet high, and are believed to have been in days long agone, either sepulchral monuments or fortified dwellings. The seamen approaching the shores gave them this name, meaning "great atalayas" or watch-towers. Port Mahon, on the eastern shore, is the capital, having about twenty thousand people, its harbor stretching three miles into the land and forming several bays, being a spacious, safe and much prized anchorage that is easily defended. This is regarded as probably the best harbor of the Mediterranean, and the grim old Genoese admiral, Andrea Doria, who often took advantage of it, had a proverb that "June, July, August and Port Mahon, are the best ports of the Mediterranean." In the long series of wars between England and France, this harbor was several times in English possession. General Stanhope in 1708 captured it, having scared the inhabitants by shooting arrows into the town, bearing messages threatening hard labor in the mines if they resisted. England held it nearly a half century, and through the neglect of duty of Admiral

Byng, for which he was court-martialled and executed, the French and Spanish retook it in 1756. England recovered it a few years later, but surrendered it to Spain in 1782. It was again captured in 1798, but in 1802 went back to Spain, which still possesses the island. The town has many English characteristics, and their occupation also added some English words that continue in the Minorcan language. The most pathetic recent tragedy of Minorca, was the wreck on the rocks off the northwestern coast, near Ciudadela, of the French steamer General Chanzy, bound from Marseilles to Algiers. She was driven ashore in a wild storm on the night of February 9, 1910, the boilers exploding. One hundred and fifty-six of the ship's company perished. There was a single survivor, who clung to a piece of the wreck, was tossed insensible on the rocks, revived next morning and wandered into the village, to tell the horrors of the night. There are some smaller islands in the Balearic archipelago, and among them, south of Majorca, is Cabrera, or Goat Island, which has many caverns in its limestone rocks, and is used as a place of banishment for criminals.

CORSICA.

About two hundred and fifty miles northeast of Minorca, is the Mediterranean island, which was the Greek Cyrnos, and became the modern French Corse, famous as the birthplace of Napoleon. This noted

island, which we call Corsica, lies at the entrance of the Ligurian sea, where the Mediterranean extends far up northward into the land as the Gulf of Genoa, and makes the attractive encircling shores around it, of the French and Italian Riviera. It is about one hundred miles south of Genoa and of the Maritime Alps of which it is probably an extension; and fifty miles west of the Italian shore of Tuscany. Its northern extremity is the long peninsula formed by the Serra Mountains, extending for twenty-five miles, in a narrow and high ridge, elevated over 4,000 feet, and terminating in the famous Promontorium Sacrum of the ancients, now called the Cape Corso. From here to Bonifacio at the southern termination, where the strait about eight miles wide separates Corsica from Sardinia, the island is about one hundred and sixteen miles long, its greatest breadth being about fifty-two miles. It has nearly thirty-four hundred square miles of surface, largely mountainous, and nearly three hundred thousand population. The eastern coast facing Italy is generally low, and of regular outline, made by abundant alluvial deposits brought by many small and rapid streams down out of the mountains. The western coast is high and rugged, rising precipitously from the sea, in numerous abrupt promontories, having intervening bays and harbors, disclosing magnificent scenery. Behind this bold shore, the interior is traversed by a broad chain of granite and limestone

mountains, occupying the greater part of the island, and rising in several summits exceeding 7,000 feet. The approach from the westward, over the sea, gives a grand view of these peaks, which are generally clothed in snow, the range culminating about the centre in Monte Rotondo rising 8,775 feet, with its attendant peaks Monte Cinto to the northward 8,890 feet and Monte d'Oro, southward, 7,850 feet. These mountains and their foothills are clothed with forests, and the timber here grown, which was in high esteem among the Romans, is yet exported to France and Italy for vessel masts. The island is famous for its scenic attractions, as well as for its woods and fruits, but the greatest of its productions was Napoleon Bonaparte.

The remote origin of the Corsicans is said to have been Iberia, and the Phœnicians, driven out of Asia, came here in the sixth century B. C., but the Italian Etruscans and Carthaginians soon got possession, the latter holding it until the Romans conquered in the third century B. C., though it took them nearly a hundred years to reduce the sturdy islanders to subjection. Then Corsica was used as a place of banishment, and here Seneca spent eight years when exiled by Claudius. He and Strabo, and others of that time, left very unfavorable reports of the people, Strabo describing them as untameable and vindictive. The barbarians overran it, and the Moors ultimately got possession, and in the fourteenth century

Genoa became the conqueror, holding it until the eighteenth century, when the heroic Pasquale Paoli appeared as the deliverer of his country, and in 1796 it fell to France, which has since held the sovereign power. The wild and romantic character of the country has been reproduced, during all these periods, in its people. They are brave and hospitable, but vindictive and passionate, and still have that insatiable thirst for revenge, which has become a world proverb in the *Vendetta.* Brigandage flourished until recent times, the romantic and picturesque brigands lurking in the dense mountain thickets of arbutus and similar plants, known as the *maquis,* and living when in hiding, upon the meal formed by ground chestnuts, a most abundant product, which is still the staple food of the mountaineer. The island has no art treasures, and few antiquities. Most of the rural population yet live in the rude cottages constructed by their remote ancestors, usually on steep hillsides, and being often but little more than four bare walls, with a single opening, serving alike for door and window, having occasionally an upper loft to which access is got by a ladder. There are no fireplaces, and the furniture is as uncouth as the house. These people are very devout, each village having its church, and in many are highly prized relics. In one of the interior hamlets is a tiny church, which displays in its reliquary, the horn said to have been used by Moses

in calling together the children of Israel in the desert, a tuft of Esau's red hair, the sling wherewith David threw the stone that slew Goliath, two of the thirty pieces of silver that bribed Judas, and the bridle of the ass that bore the Holy Family into Egypt.

A broad and splendid bay, environed by mountains, is deeply indented in the western shore of the island, and here is the Corsican capital and most noted city, Ajaccio, the harbor being upon its northern verge, having the houses to the westward, and the ancient citadel upon a tongue of rock protruding southward into the bay. This beautiful place, with its superb outlook over the sea and the surrounding and usually snow-covered mountains, was chosen by the Genoese for their port and stronghold in the fifteenth century, while Napoleon made it the capital, at his mother's request, in 1811. He always admired its tropical luxuriance of vegetation, and the fragrance of its almond and orange groves. The chief streets are bordered by rows of acacias, citrons and orange trees, and one highly pleased German writer, Gregorovius, tells of these trees "stretching out their golden fruit, those darlings of the Hesperides, to welcome the enchanted visitor to this favored isle." The climate is mild and equable, and the atmosphere almost always clear, while the mercury, during the season from November to April, is rarely below 50° or above 60°. The

scenery of the island is among the finest in the world, and a charmed visitor, writing in the *Alpine Club Journal,* says he knows of "no such combination of sea and mountains, of the sylvan beauty of the north with the rich colors of the south; no region where, within so small a space, Nature takes so many sublime and exquisite aspects as she does in Corsica. Orange groves, olives, vines and chestnuts, the most picturesque beech forests, the noblest pine woods in Europe, granite peaks, snows and frozen lakes — all these are brought into the compass of a day's journey. Everything is as novel to the Alpine climber, as if, in place of being on a fragment of the Alps, severed only by a hundred miles from their nearest snows, he was in a different continent."

The Ajaccio citadel on the protruding tongue of rock, which, with a projecting mole, protects the southern verge of the harbor, is the chief structure of the older town, and the newer portions are northward, across the broad Place des Palmiers, a pleasure ground adorned with palms and other fine trees. The sojourner soon finds that everything in Ajaccio has to do with Napoleon and his family, the great Emperor being the tutelary genius of the place. An elaborate fountain in the Place des Palmiers is surmounted by Napoleon's statue as first Consul. Fronting the Place is the Hotel de Ville, containing a museum of Bonaparte relics. The streets leading from the Place are the Boulevard du Roi Jerome (his brother),

the Rue Fesch (his uncle), the Rue Napoleon leading to the Bonaparte Mansion where he was born, and the Avenue du Premier Consul, extending southwest to the Place Bonaparte, which is adorned by an equestrian statue of the Emperor with his four brothers afoot, by Barye, unveiled in 1865. They are marching toward the sea, indicating that they left the island to seek their marvellous fortunes. To the southward of the Place des Palmiers is the small Place Letizia (his mother) and here is the great attraction of the town, the modest four-story house, of unpretentious appearance, where he was born, bearing the inscription in French, "Napoleon was born in this house August 15, 1769." It contains various relics and reminiscences of the family. His father was Carlo Maria Bonaparte, a native of Ajaccio, a lawyer, and his mother Letizia Ramolino. They had thirteen children, Napoleon being the second son and Joseph the oldest. The French had conquered Corsica just before his birth. The cathedral is but a short distance from the house, and the tradition is that his mother, being taken in labor while attending Mass, she hastened home, and he was born on a piece of old tapestry, whereon were depicted the events of the *Iliad*. Accompanying his father, he visited the Continent when very young, and in his tenth year was sent to the French military school at Brienne. His father died in 1785, but his mother long survived him. During his days of greatest power, he

paid little attention to Corsica, his last visit there having been on his return from Egypt, in September, 1799. But when in exile at St. Helena, he often spoke of his birthplace, and once said: "What memories Corsica has left me! I still think with pleasure of its mountains and its beautiful scenery; I still remember the fragrance which it exhales." His last companions, his physicians and confessor, were Corsicans. The old dining-room is kept as it was in his youth, with the ancient table and chairs, and primitive china setting, and also the modest bedroom that was his as a child, and where he last slept on his return from Egypt.

Upon the Rue Fesch, is the College Fesch, now a library and picture gallery. Cardinal Fesch was the half-brother of Napoleon's mother, and his bronze statue adorns the interior court. In the chapel are his tomb, and also that of Napoleon's mother, she dying in Rome in 1836, the chapel having been constructed by Napoleon III as his memorial. In the Ajaccio Cathedral, a modern structure, is the font where Napoleon was baptized in July, 1771. A foil to the universal celebrity of Napoleon, in Ajaccio, is the small palace of the Pozzo di Borgo, on the Rue Napoleon. Carlo Pozzo di Borgo, born here in 1768, was at first among Napoleon's greatest admirers, and an adherent of Paoli, but afterward his bitterest enemy, removing to Russia, where he became a Councillor of State, a count, and an ambassa-

dor, devoting all his energies to checking Napoleon's ambitious projects. He died in Paris in 1842. A popular visit, in the suburbs of the town, is to climb Monte Salario, about three miles inland, and from the summit, at nearly one thousand feet elevation, enjoy the admirable view over the harbor, mountains and sea. About seven miles northwest is the summit of the ridge, where the Counts of Pozzo di Borgo have a castle, built from various remains of the Paris Tuileries, reproducing its central pavilion, and here, from an elevation of 2,600 feet, is a splendid panorama of the peninsula, stretching into the Mediterranean west of Ajaccio, and of the grand mountain ranges in the interior of the island, their snowy summits being seen far to the northeast. Facing southward toward the sea, and about two miles west of Ajaccio, in a situation of wondrous beauty, is the cemetery. Here on the picturesque hill slopes, amid olive and orange groves, are the highly decorated mortuary chapels of the rural necropolis.

Railroads have been opened in Corsica, and the chief one leads among the mountains, from Ajaccio northeastward to and beyond the old capital of Corte. It passes through the forest of Vizzavona, famous for its splendid beeches, chestnuts and firs, and displaying some of the best mountain and forest scenery of the island. To the westward rises the noble summit of the Monte d'Oro, and a little way beyond, the massive Monte Rotondo. Its top is a wilderness of

blocks of granite, with a snow-capped crater-shaped summit, from which is displayed a grand landscape view over the rocky masses of this mountainous island, shut in toward the south, however, by Monte d'Oro. Upon these high surfaces browse the dark-brown *mufflone,* the curious wild horned sheep of Corsica. Rounding the extensive flanking buttresses of Monte Rotondo, piercing tunnels and crossing high above romantic ravines, the old capital of Corte is reached, about fifty-two miles from Ajaccio, its lofty citadel commanding the town. As Ajaccio reveres the memory of Napoleon, so does this place worship at the shrine of the patriot Pasquale Paoli, and the principal square, the Place Paoli, displays his bronze statue. He was born in 1724 at Stretta, a small village among the mountains to the north-eastward, his father having been a leader of the Corsicans in their struggles against the Genoese and the French. Young Paoli, after service in these wars, went to Holland, and finally to England, where he lived several years. After a long while he returned, led the Corsicans in their successful revolt, became the ruler, and made Corte the headquarters of his government, the Bonaparte family being then among his followers. At the Palace are still shown his study with cork-lined window shutters, and his council chamber. The Bonapartes ultimately separated from him, and Paoli seeking English aid, they conquered the island in 1794. In 1796 the French got

possession, and Paoli retired to London, where he died in 1807. Surrounded on all sides by mountains, including the highest peaks of Corsica, Corte is in a most striking situation, its scenery rivalling the greatest Alpine valleys, and strangely contrasting the bleak rocks and snow with a most luxuriant vegetation.

To the northwest rises Monte Cinto, the most elevated Corsican mountain, and passing some distance from its eastern base, the railroad beyond skirts the noble forest region known as the Castagniccia, or the "land of chestnuts." About twenty miles from Corte is Ponte Nuovo, where Paoli was finally overcome by the French. The river Golo is followed down to the flat coast district of the eastern shore, which has much marsh and many lagoons, and here at the river's mouth, on the plain, are the remains of Mariana, the Roman colony that Marius founded. The most extensive lagoon, stretching along the coast northward of Mariana, is the Etang de Biguglia, and on its shore was the Genoese capital, when they ruled the island. Farther on, and beyond this lagoon, is the harbor of Bastia, the chief Corsican seaport. The Genoese founded it in the fourteenth century, building a strong castle to defend the port, and from this, known as the "bastion," came its name. The old town and castle overlook the newer settlement, encircling the harbor, where there is a good trade, the city having about twenty-five thousand popula-

tion. All around the Corsican coasts, excepting on the low-lying but fertile eastern shore, are romantic cliffs, and attractive resorts upon the many rock-bound harbors. The southern extremity of the island is a prominent and lofty rock, to which came in the ninth century, after a naval victory over the Moors, the Tuscan chief Bonifacio, to land his captives and plunder. The result was a settlement and a castle on the rock, which the Pisans and the Genoese subsequently fortified. On top of the rock, near the citadel, is the Torrione, a massive watch-tower Bonifacio is said to have built, and at its foot descends the King of Aragon's staircase to the edge of the sea. King Alfonso I of Aragon besieged the place in 1420, and it made a most gallant defence. During the siege, the king's soldiers, unknown to the besieged, cut this flight of over two hundred steps in the face of the precipitous cliffs. There are wonderful caves in the limestone rock, most of them hung with beautiful stalactites, while a marine fungus, which clings to the limestone, reflects upon the water, in a guise that gives it the appearance of being covered by a lacework of jewels. These caves, in places, almost undermine the rock, and many of the houses on the top overhang the edges in a startling yet picturesque way. Various ancient churches, and other old buildings, surmount the massive promontory, and from its southern verge there is a beautiful view across the blue waters of the strait and its dotted

islands, to the distant shore of Sardinia eight miles away.

SARDINIA.

The geologists tell us that the granitic mountains of Corsica, were originally extended across the Strait of Bonifacio into the land to the southward, but that in some remote age, a natural convulsion cut down the water passage, and made this another island. As it is to-day, many rocky islets are dotted over the strait, and lie off the bold Sardinian shores of which the northern extremity is the Punta del Falcone. Among these attendant islands around the picturesque coast of Sardinia, is Caprera, off the north-eastern shore, covering about ten square miles, where the Italian patriot Garibaldi made his home, during the later years of his memorable contest for Italian liberty and unity. The Grecian Sardo, which the Italians call Sardegna, and we know as Sardinia, is a mass of mountain ranges, mostly of granite, and including various extinct volcanoes, covering over nine thousand square miles, and is about one hundred and seventy-two miles long and seventy miles wide. These mountains have many peaks and ridges, making a rough country, and culminating about the centre of the island in the summit of the Bruncu Spina, elevated 6,280 feet. This is in the Gennargentu range, its southern slopes being the wildest part of Sardinia, where the people still boast that their re-

mote ancestors never yielded to Carthaginian, Roman or Moor, and it still is unsafe for visitors to travel without a military escort. The original people were Iberians, and the first foreign settlers were Phœnicians, who sought the harbors on the southern coast, as havens for their ships, when on the way to western Tarshish. The projecting northern coast of Tunis, in Africa, comes comparatively near, and thus contracts the sea passage, while to the eastward is Sicily, and the triangular gulf thus enclosed by Sicily, Sardinia and Italy is the Tyrrhenian Sea. The Carthaginians early invaded and subdued part of the island, and next came the Romans, though the interior tribes were never subdued by either. Much of the coast of Sardinia is uninteresting, and on the plains and in the river valleys, the conquerors had extensive grain fields which supplied both Carthage and Rome, though now the land is largely uncultivated, and cattle-raising and mining are the chief occupations for the export trade. The Romans sent their criminals and Christian slaves to work in the mines, but themselves shunned Sardinia, because they regarded the climate as unhealthy, and the people as proud, independent and unconquerable. Their Sardinian captives were generally taken to Rome and sold cheaply for slaves, as even then they were too spirited for their taskmasters, whence came the expression *Sardi venolas,* "as cheap as a Sardinian." The Vandals and Moors subsequently overran the island,

but the native princes were never subdued, and they recognized the Pope as their protector, so that John VIII in the early eleventh century, preached a crusade against the infidels, which resulted in their expulsion by the Genoese and Pisans. These, with many interposed quarrels, ruled for two centuries, and then the kings of Aragon under papal patronage came into power. The Spaniards were rulers for three centuries, and afterward the island came to the House of Savoy, the King of Sardinia, in 1861, becoming the king of united Italy.

The visitors to the island usually sail from Civité Vecchia in Italy, to Cape Figuri, bounding the Gulf of Terranova, on the northeastern coast, from whence the main railway system leads throughout Sardinia. This is a rocky district, without much habitation, but it was a very early settled region, the spacious and attractive gulf having been the ancient Portus Olbianses, with remnants of the Roman town of Olbia on its inner shore, now the little port of Terranova-Pausania. The railroad crosses the island to Sassari, near the northwestern coast. On its way is passed a volcanic hill, where is traceable an old stream of lava, and alongside a ravine is the Nuraghu Nieddu, or the "black nuraghe," a lava-built tower, consisting of several chambers one above the other. This is a relic from a prehistoric epoch, far antedating either Carthaginian or Phœnician. Many of these mysterious structures are scattered

over Sardinia, and the antiquarians describe them as tombs, temples, forts and dwellings, their real object not being accurately known, though it is probable the early inhabitants built them as places of refuge when attacked. They are conical, with truncated summits, thirty to sixty feet high, and sometimes as much as one hundred feet in diameter at the base, built of blocks of stone or lava, put together without mortar, and placed usually on eminences or mountain slopes. The interior is composed of two or three conically vaulted chambers, one above the other, a winding stairway being built within the thick walls, to reach the upper rooms. Sassari, the capital of the northern Sardinian province, has about forty thousand people, with St. Gavinus as its patron saint, a Roman centurion who embraced Christianity during the persecutions of Diocletian. His equestrian statue adorns the fountain of the copious spring, on the eastern side of the city, which supplies it, the Fontana del Rosello, the water being carried through the streets in small barrels slung on the backs of donkeys, the same as during centuries gone by. The tomb of St. Gavinus is in the church at Porto Torres, on the northern coast, the seaport of Sassari, which is a single long street on the shore, having Roman remains of the ancient Tunis Libyssonis. From an antique column at the harbor's edge, an ancient highway of the Romans extends all the way throughout the island,

to Cagliari on the southern coast, where its end is marked by another column. Here are seen an old Roman bridge of seven unequal arches, crossing the stream flowing into the harbor, and also interesting remains of the Temple of Fortune. In this remote portion of Sardinia, the peasant women, as of yore, wear most picturesque and attractive costumes.

The branch of the railway proceeding southward through the island, is constructed nearer the western shore, and generally upon high plateaus, giving extensive views over the barren mountains. The modern engineers who built the line, on most portions have followed the route of the ancient Roman road. At Macomer, it passes through a district containing a large number of the Nuraghi monuments, the most elaborate being Santa Barbara, north of the town, an impressive cone constructed upon a high square base. To the southward, the route descends to a fertile plain, bordering the intervale of the Tasso, the chief Sardinian river. This is the Campidano plain, through which, in marshy meadows, the Tasso flows into the Gulf of Oristano, on the western shore, where its delta covers a large surface bordered by salt lagoons here called "stagno." The Roman port of Othoco was in this region, its successor being now Oristano, with attractive towers of the early fortifications still carefully preserved. This was the noted district of Arborea, and its native ruler,

the Grand Duchess Eleanora, who died in 1404, successfully contended with the king of Aragon, the principal square being embellished with Eleanora's marble statue. Eleanora gave the people a charter of liberty, known to medieval fame as the "Carte de Logu," and the remains of the castle where it was granted are on the shore of the salt lagoon to the westward of the town. Beyond, are the scanty remains of the Phœnician settlement of Tharros. On the fertile slopes to the northward of Oristano, sheltered from the winds by the mountain ranges, are extensive orange and lemon plantations, their fragrance perfuming the air, and displaying groves of the finest trees in existence. To the southward is Sanluri, where, after Eleanora's death, her husband and successor, Brancaleone Doria, was defeated in 1409, by Martin, king of Sicily, who belonged to the house of Aragon. This is in a region noted for the cultivation of saffron.

Near the western coast of Sardinia is Monte Murganai, elevated 3,010 feet, which is ascended for its superb view. Around the southern base, is the most important mining district of Sardinia, the central town being Iglesias, where there are 12,000 people, its name derived from the large number of churches, while so many fragrant gardens are in the suburbs, that it has gotten the popular Italian title of *floré di mundu* or "the flower of the world." The Pisans built the town walls, of which there are

interesting remains of towers and battlements. They also constructed the cathedral in the thirteenth century, while the Aragonese, when they got possession in the next century, built the old castle, now in partial ruin. The mines to the west and north of the town were worked in the most remote times, and the ruins of the Temple of Antas, are among the northern mines, the people calling it the "House of St. Gregory." Monteponi, to the southwestward, rises about 1,100 feet, and contains the richest lead and zinc ores in Sardinia. Off the coast is the island of San Pietro, the ancient Enosis, a mass of trachyte, with fissured and columnar cliffs around its shores, the adjacent waters having prolific tunny fisheries, this favorite food of the Italians being taken in large nets during May and June, and some of the fish being of great size. To the southward is San Antioco island, connected by a chain of low sand-pits with the shore. Its present small town of San Antioco, occupies the location of the Phœnician settlement of Sulci, afterward a Roman colony, and displaying many antiquities, among them the necropolis of both those nations, and a spacious Roman cistern. Off the southern coast rise three steep and peculiar island rocks, which the natives have named the Calf, the Cow and the Bull.

The southern Sardinian coast is picturesque, having deeply indented into it the Gulf of Cagliari, with the projecting cape of Santa Elia bifurcating its

inner shore, a bold rock rising about 500 feet from the sea. The wide and fertile plain that stretches from the Gulf of Oristano to the Gulf of Cagliari, known as the Campidano, is rich in corn, wine and oil, and well populated, though lacking rain it becomes very hot in summer from the African winds, and is exposed to malarial influences. Tall hedges of cactus enclose the fields, and most of the village houses are built of bricks dried in the sun. Thirty-two miles eastward from Iglesias runs the railway, which turns southeast through this plain, and goes out to the gulf shore at Cagliari, the chief city and capital of Sardinia, spreading over the plain as it stretches toward the sea, and having to the eastward, the projecting ridge terminating in Cape Santa Elia. It is noted for its sweet cakes, which are an almost universal food of the people, and for the salt produced by convict labor from the extensive lagoons surrounding the city; and it is also regarded as a very hot place during most of the year. A precipitous hill rises 290 feet high between two broad lagoons, and on its slope the city is built. The Stagno di Cagliari, on the western side, down to the middle ages was a bay, and on its low inner shore, between the beach and the hill slope, northwest of the present city, the Phœnicians made their first settlement that became the Roman Carales, from which the present name is derived. The older town then was built on the

hill, the newer town being on the slopes to the east and south, and now there are about fifty thousand population. A tree-shaded street, the Via Roma, fronts the harbor, and is the fashionable promenade. From this another broad street, the Largo, goes inland, through the modern town, to the central square, the Piazza Yeune, in the centre of which is the ancient column marking the termination of the Roman road leading northward, through the island, to Porto Torres. Here, at the end of the Largo, is a statue of King Charles Felix I. From the Piazza down to the coast, stretches the busiest street of Cagliari, called in various parts the Via Manno, the Corso Vittorio Emanuele, and in the lower portion, the Via Garibaldi. The Castello, or older town, is on top of the hill, enclosed by its ancient walls, with their gates and towers, and here are the palaces of the nobles and the principal buildings, while terraces on the verge of the hill, replacing the old bastions, that were removed, have a pleasant view. Steep streets and flights of steps, give access and add to the picturesqueness. Here is the cathedral, built by the Pisans in the early fourteenth century, though modernized, and in it is the Tomb of Martin II of Aragon, who died in 1409. The University was founded by Philip III of Spain, in the sixteenth century, and has a large library, and a museum established by King Charles Felix in 1806. The ancient

Roman amphitheatre, excavated in the rock, sloping toward the sea, is well preserved, while there are numerous Roman houses, tombs and other survivals, including the ancient aqueducts and reservoirs, Carales having been entirely dependent on rain-water for its supply. In the neighborhood of Cagliari is produced the Malvagiu, or malmsey wine. The western shore of the Gulf of Cagliari extends far away to the southward, and down there are the remains of the oldest town in Sardinia, the Phœnician Nora, where there are traces of a theatre, aqueduct, tombs, and some ruined houses, overflowed by the sea. Here is the church of Santa Efisio, and at the festival at the beginning of May, the remains of the Saint are brought in solemn procession, eighteen miles from Cagliari, and exhibited in the church, the ceremonial continuing two days. The extreme southern coast of Sardinia faces the Mediterranean, in the bold capes Spartivento and Teulada, but the distance is not very far across the sea to Tunisia in Africa.

MALTA.

From the African coast, the depressed strata of the Atlas mountains, submerged under the sea, cross the comparatively narrow waterway intervening between Africa and the shore of Sicily to the northeast, and stretch to the eastward also. These strata occasionally rise above the surface, in various

islands, the most famous being the precipitous and originally sterile rock, that the ancients called Melita, and which we know as Malta. The Maltese group, composed of Malta, Gozzo, Comina, and some other uninhabited rocks, is near the centre of the Mediterranean basin, and they appear as the remains of an ancient chain of islands, much worn and still wearing away by the sea. In the approach by steamer, there being no very high hills upon it, Malta, when first sighted at a distance of a dozen miles, has the appearance of a barren and low-lying shore. Soon the island changes, and seems like a rock of yellow sandstone, rising out of the sea, and made the more plainly visible by the rays of the setting sun. Approaching nearer, it is found to be a mass of white, gray, reddish and yellow sandstone, the blue sea running up into various bays of the brown and yellow land, diversified by valleys and steep hills, and relieved by the patches of deep green in the fields, though the general aspect of the surface is bare, there being no woods, while all the fields are enclosed by stone walls. Sailing still closer, the mass of yellow rocks and colored sandstone, gradually resolves into a grand city, ascending abruptly out of the water, with church spires, watch-towers, lofty buildings, and a network of enormous forts all around it. The strong defences rise one above another, the sentries, in their English red-coats, pacing the parapets, and

Harbor Entrance and Fort Ricasoli, Malta.

black guns peeping over the edges, and through many portholes in the sandstone. The steamer passes in front of the forts, turns around a sharp angle of high rock, bearing the huge castle of St. Elmo, and then by a comparatively narrow inlet enters the grand harbor, and anchors. Here, amid a fleet of warships, and surrounded by forts, with another harbor running up into the land, where the merchant shipping moor, a wild horde of Maltese boatmen, with scarlet caps and sashes, in their gaily painted and white awning-covered gondolas, surround the anchored ship, and noisily clamor to get possession of the passengers for landing.

Malta is about seventeen miles long and nine miles wide, with a surface of less than one hundred square miles. It has little water; no river, brook, or lake exists; there is neither forest nor brushwood; and the rocky surface, exposed for centuries to the parching winds of the African desert, is but thinly covered with an artificial soil, most of which is said to have been originally brought over from Sicily. This soil is often terraced upon the sides of the hills, to guard against washing away by the winter rains. It is carefully cultivated, and made to yield two or three crops annually. Cotton, grains, hay and fruits are grown, the olive, orange and fig being renowned, while early potatoes are raised for the English market. The flowers of Malta are famous, and Cicero mentions the cushions stuffed

with roses sent from Malta and used by Verres in Sicily. In summer the heat is excessive, day and night, but the winter climate is delightful. The atmosphere is so clear, that at all times of the year the distant summit of Mount Etna, northward, in Sicily, may be seen with its faint smoke cloud during the rising or setting of the sun, though it is one hundred and thirty miles away. The northern and eastern coasts of the island are broken by deep indentations and bays, and at the southeastern corner is the bay of Scirocco, which is said to have been gradually scooped out during the ages by the African sirocco, continually blowing against that shore with unbroken force. The highest point of Malta is in a cluster of the Bingomma hills, remarkable for their steeply conical shapes, which are near Deagli, and look out upon the southern sea, this elevation being 845 feet. A little way off is Citta Vechia, the ancient capital, on another steep height. Upon the western and southern coasts, the cliffs rise sheer from the sea, three to four hundred feet, while to the northward, the rocks are generally shelving toward the water's edge, though the harbor of Valetta and St. Paul's bay are exceptions. There is a population in the group of islands of about 180,000, including the English and foreign residents, numbering about 10,000, while the English garrison also is usually about that number. The natives are a mixed race,

the descendants of the different peoples who have at various times controlled these islands, their language being an Arabic dialect mingled with Italian, though English is used in official life. They are an enterprising, commercial and seafaring race, who conduct trade throughout the Mediterranean. Its central position gives Malta great strategic importance in controlling the sea, and its admirable harbor of Valetta, guarding the Mediterranean route to the East, makes it and Gibraltar the principal bulwarks of English naval supremacy.

In the northwestern part of the island, between St. Paul's bay and Melleha bay, in a ridgy hill extending back from the sea, are several caves, one of which, having a clear spring of water, is known as Calypso's grotto. This nymph, who was the daughter of Atlas, enslaved Odysseus, and Homer calls the island Ogygia in telling the story. This is the earliest mention of Malta, and the first known settlers in the historic period were the Phœnicians from Sidon. Afterward, in the eighth century B. C., the Greeks came, it being then known as Melita. There have been various prehistoric remains explored, in 1907 and since, which show the very early history of the island — great megalithic structures which were temples in the bronze age, at Hagiar Kim, Gigantio and Mnaidra, with Coradino and Halsaftieni excavated in the rock near Valetta, the latter a burial place where much ancient

pottery was found. The Carthaginians captured Malta, and then the Romans, 212 B. C., the latter erecting temples to Apollo and Proserpine, and other structures, of which traces still exist. St. Paul, in the year 61, was wrecked in what is now called St. Paul's bay, on the northern coast, and while here, made several converts to Christianity. He is said to have lived for three months, in a grotto about six miles southward, now part of Citta Vechia, a church having been built over it. The Vandals, the Goths and Belisarius, were subsequently the successive masters, and the Arabs came in the ninth century, and the Normans from Sicily in 1090, after which the island for several centuries was part of the kingdom of Sicily, over which, as the heir of Aragon, the Emperor Charles V ruled in 1530, when he presented Malta to the Knights of St. John of Jerusalem, who had been expelled from Rhodes by the Turks. Their rule continued until 1798, during which era Malta achieved its greatest fame.

This noted order first appeared in the eleventh century at Jerusalem, where a hospital for men had been established, bearing the name of St. John the Almoner, a native of Cyprus and the Patriarch of Alexandria, who had lived in the sixth century and had given great aid to the people of Jerusalem. Those in charge of this hospital, displayed such heroic charity when Jerusalem was captured by the

crusaders in 1099, that several noble knights then joined them. The Order growing, the Pope approved its objects, and hospitals for pilgrims were established at various places. In the twelfth century the Knights extended their sphere of duty, and armed themselves, for the protection of the pilgrims and Christians of Jerusalem, against the Moslems. This attracted the young nobility from all parts of Europe, and they took a vow for the defence of Christians from insult and wrong, and built at Jerusalem a magnificent new church, dedicated to St. John the Baptist, after whom they called the Order. Their influence was largely extended, they took part in various crusades, and incurring the special enmity of the Turks, they were attacked by Saladin, and almost overwhelmed, when the Moslems captured Jerusalem. They revived, but were defeated at Gaza, and again at Acre, when they retired to Cyprus, and in 1309 secured the island of Rhodes, which became their headquarters, and was held for two centuries against repeated attacks by the Turks. In 1522, after a gallant defence, they were driven out of Rhodes, and wandered through Candia, Sicily and Italy, when in 1530, Charles V gave them an abiding place in Malta. The Mediterranean had then become a chief theatre of warfare between the Christians and the Turks, and the Knights made the island one of the strongest places in the world, and it was regarded as the great bulwark of Christendom, the

Order assuming the title of Knights of Malta, with Citta Vechia as their capital.

The Turks attacked them in 1551, and were driven off, but came again in 1565, making the most fearful siege of that era, continuing nearly four months, before they were repulsed. The Grand Master of the Order was Jean Parisot de La Valette, who was born in 1494, and chosen to the office in 1557, dying in Malta in 1568. The Sultan Solyman the Magnificent, determining upon their annihilation, sent an expedition on May 18, 1565, of one hundred and eighty Turkish war vessels, carrying thirty thousand troops, and added repeated reinforcements. La Valette, anticipating their coming, had built new fortifications on the northeastern extremity of the peninsula in the harbor where Valetta now is, and his garrison was only seven hundred Knights and eighty-five hundred soldiers, including the armed inhabitants, yet with these he withstood the terrific siege until September 8, when a force of eight thousand men came to his help from Naples, compelling the Turks to take refuge in their ships. They renewed the attack shortly afterward, but were defeated with great slaughter, and retreated in disorder. The Turkish losses were said to have been fully thirty thousand during the siege, while the Knights, at the end, had only about six hundred men remaining out of all their combatants. La Valette rebuilt and strengthened the fortifications, and

founded here the town of Valetta, to which he removed the capital, and these fortifications have been extended and improved, so that Valetta is now regarded as an impregnable fortress. On June 17, 1798, Napoleon was at Malta with the French expedition to Egypt, and he got possession by treachery and stratagem, practically bribing the Grand Master Hompesch, who abdicated. The Order afterward dwindled, being protected for awhile by the Emperor Paul of Russia, but since 1805 its affairs have been administered from Rome. The French, however, did not long hold possession of Malta, for in September, 1798, the English began a siege, lasting two years, and in September, 1800, they captured the island, which they have since controlled.

In November, 1908, Malta had its terrible modern tragedy, in the burning of the steamship Sardinia, which had come from Liverpool and leaving Valetta early on the 25th to sail to Egypt, caught fire when going out of the harbor, and within sight of the population who lined the shores, was burnt, there being 140 passengers roasted to death, many of them being Arab pilgrims going to Mecca. The brave captain was burnt at the helm.

Valetta, in its admirable harbor, and surrounded on all sides by the great defensive forts, is one of the most extraordinary places in the world. A capacious bay opens toward the northeast, on that side of Malta. All around the bay are high ridges, which

stretch forth in tongues of land with intervening waterways, while protruding through the centre, like another huge tongue thrust out of a mouth, toward the sea, is the elevated rocky ridge of Monte Sceberras, dividing the bay into two spacious harbors. At the entrance from the sea, on either hand the enclosing borders turn inward toward the central tongue, making comparatively narrow passages, and on the inland peninsulas of the eastern or Great Harbor, are built the various towns, known familiarly as the "Three Cities," Vittoriosa, the home of the working people; Burmula, the naval station and dockyard; and Senglea, on the opposite shore of the dockyard creek. High above them, on the outer extremity of the central tongue of land, is Valetta, its steep streets running up from the quays at the waterside all around, to the plateau on top, many of them being long staircases. At the outer end, and facing the sea, is the formidable Castle of St. Elmo, while across the narrow entrances on either hand, on the terminating headlands enclosing the bay, are Fort Ricasoli to the eastward, and Fort Tignete to the westward, the latter reinforced on another protruding rock peninsula, just inside, across the intervening estuary of Sliema Creek, by the powerful Fort Manoel, set at the opening to the interior Marsamuchetto Harbor, on the northwest side of the central tongue. For about a mile, upon the summit plateau of this tongue, Valetta spreads back

from the sea, its Cathedral of San Giovanni, and the less impressive Palace of the Governor, formerly the Grand Master's headquarters, dominating the summit. On the land side are additional elaborate defensive works, between the town and the Floriana suburb, access being cut off on that side, by the most spacious fosse existing in Europe. Huge 100-ton guns are mounted on St. Elmo and Ricasoli, defending the approach to the Great Harbor; the British flag flies from the staffs on both forts and on the Governor's Palace; the whole place is conducted as a military post and naval station, the morning and evening guns noting the beginning and ending of the official day; and thus is the English control of the Mediterranean, signalled at the centre of the famous sea, the same as at Gibraltar, guarding the entrance. Since history began, the race at the time controlling the Mediterranean, has held Malta as its stronghold.

Valetta is a wonderful place to visit, albeit the visitor may be fatigued by climbing its staircase streets, to get from the harbor up to the town. It disputes with Venice the title of the "City of Palaces." Lord Beaconsfield wrote of it, "Malta is certainly a most delightful station. Its city, Valetta, equals in its noble architecture, if it does not even excel, any capital in Europe. If that fair city, with its streets of palaces, its picturesque forts and magnificent church, only crowned some green and azure

island of the Ionian sea, Corfu for instance, I really think that the ideal of landscape would be realized." Malta is the great halting place for vessels, going in every direction through the Mediterranean, and this makes the cosmopolitan character of the people seen in the streets of Valetta, which first impresses the visitor. Having run the gauntlet of the screeching and brigand-looking boatmen, who quarrel for the chance to take the passenger and baggage ashore, and having been landed, the streets present a diversified population, Turks, Syrians, Persians, Greeks, wearing their national costumes, native Maltese and dark Italians, with negroes from Africa, English uniformed officers, red-coated soldiers and sauntering sailors, many priests and religious processions, while the women almost universally wear black dresses and hoods, without any relief in color. The legend explaining this is, that when Malta was sacked by the French troops, the women vowed that in memory of their brutal treatment, they would for a hundred years dress in black and wear a distinctive hood, the *faldotta,* popularly known as the "hood of shame," and though the century has passed, the custom still exists. This is a huge bonnet, with a long skirt reaching to the waist, and totally black without ornament.

The "Great Harbor," which has ample space and depth of water, also has on its southeastern side, opposite the central tongue of Valetta, no less than five

deep waterways thrust far into the land, with intervening peninsulas, and here are the "Three Cities" and the great station and dockyard which is the British naval headquarters in the Mediterranean, with its huge docks, repair shops, foundries, storehouses and bakery. Valetta, from its high hill, looks out upon this busy scene. The Castle of St. Elmo, at the sea front, has its beacon lights to guide the ships, and from it, southwest through the city, stretches the chief street, displaying attractive shops, the Strada Reale, to the Porta Reale, the gateway at the huge fosse, separating Valetta from Floriana. In the centre of the city, this street expands into the open promenade of St. George's Square, where the military band plays in the afternoons. Along one side is the spacious Palace of the Governor, a somewhat plain structure built around two courts, the interior halls containing various relics of the Knights of Malta, with a corridor of portraits of their Grand Masters. There are a library and a museum of Maltese antiquities in the adjunct buildings, and a marble statue of Queen Victoria adorns a smaller piazza alongside. To the southwest is the richly decorated cathedral of San Giovanni, built by the Knights in the sixteenth century, and containing many of their tombs, including those of L'Isle Adam, the first Grand Master at Malta, and La Valette. There is a painting of the beheading of St. John, by Michael Angelo, in one of the chapels, and va-

rious tower-keys taken from the Turks are preserved as relics, particularly the keys of Jerusalem, Acre and Rhodes. Each nationality of the Knights, of which there were seven, had a separate chapel in the cathedral, the Portuguese, Spaniards, Provençals, Austrians, Italians, Frenchmen and Bavarians. The interior is richly decorated, notwithstanding the fact that when the French captured the city in 1798, they carried off the most valuable church possessions, jewels, golden vessels, statues, vestments and art works, it being said that Napoleon himself took a diamond ring from the finger of the jeweled glove covering the hand of St. John, and also the diamond-mounted sword of Grand Master La Valette. In the church tower is a chime of ten bells, and its clock has a triple face, one dial showing the hour of the day, another the day of the week, and the third the day of the month. Each nationality of the Knights also had their Auberges or homes in the city, now converted into hospitals, barracks and hotels, etc., the most interesting of these being the Auberge de Castile (the Spaniards), now the combined mess of the British artillery and engineers, and described as the "finest mess-house in the world." The military Malta Union Club occupies the Auberge of the Provençals. Some of the bastions and former military parades are now laid out as gardens, and this is especially done where they have a fine outlook over the harbor, the adornments being statues of the Grand

Masters and British Governors. One of the best of these gardens is the Piazza Regina fronting the Auberge de Castile. This commands a splendid view of the harbor, nearly two hundred feet below, with its five separate basins, the docks and stores of the naval station, and the fortified "Three Cities," surrounding and spreading up the heights behind.

On the western side of Valetta, across Marsamuchetto bay, with its four protruding peninsulas and enclosed intervening basins, are more fortifications and towns, Pietà, Misida, San Giuliano and Sliema, which are residential suburbs. Over there is also an aqueduct begun by the Knights in 1610, which brings water to Valetta from the higher western parts of the island, and the Malta railway, which runs to Citta Vechia, the ancient capital, known as *La Notabile*. This town of Citta Vechia is well fortified and occupies a high eminence, a steep road mounting the hill to the fortress. It is an ancient place, and its cathedral is said to occupy the site of the house of Publius, the Roman governor of the island, who gave a hospitable reception to the shipwrecked St. Paul. Cannon are mounted in front, thus continuing the custom of the Knights, and the interior has many relics of their rule, including a silver crucifix brought from Rhodes. In the southern part of the town, the Church of St Paul is built over the grotto where he is said to have sojourned. There are various Roman relics and remains of structures of that age,

and the Catacombs, partly of Roman origin, are quite extensive. Among other curious places is the Chapel of human skulls and bones, artistically arranged, having been collected from various sepulchres. The monks held services in an adjoining chapel. To the southward of the town are the ruins of the ancient Phœnician temple of Hagiar Kim, while a favorite excursion is northward to St. Paul's bay, the locality where the Apostle was shipwrecked, and curious little shells are found, which the Maltese call "St. Paul's Teeth." Comino, an island which has scarcely any inhabitants, is northwest of Malta, and beyond is the larger island of Gozzo, the ancient Gaulus. The steamer voyage thither gives a good view of the cliffs and bays of the Malta coast, and of the rocky grottoes, scooped out by the sea, in the western promontories of Comino. The chief relic of Gozzo is the Torre de Giganti, a Phœnician construction built of blocks of stone without mortar.

THE ITALIAN ISLANDS.

There are several attractive islands in the Mediterranean off the Italian western coast. To the eastward of Corsica, the promontory of Piombino is extended from the Tuscan shore of Italy, and about five miles away is the imposing mountain group making the island of Elba, famous as the place of Napoleon's exile. It was the Greek Æthalia, and the Roman Ilva, noted from the earliest times for rich

deposits of iron ore. Elba is about eighteen miles long and averages seven miles wide, its picturesque coasts rising inland into masses of mountains, of which the highest summit Monte Capanne is elevated 3,300 feet. The chief town is Porto Ferrajo, on the northern shore, upon a splendid bay enclosed by an amphitheatre of mountains, its name coming from the iron it exports. The mountainous surface makes the whole environment of Elba a series of deep bays and bold promontories, forming a very irregular outline, the breadth in some places not exceeding three miles, while the enclosed valleys are fertile. The iron mining, however, more than agriculture, has been its chief industry, the ores being mainly found in a mountain near the eastern coast, two miles in circumference, fully five hundred feet high, and the ores yielding fifty to seventy-five per cent of the metal. The early mine shafts of the ancients are still visible. Various Italian cities controlled Elba in the middle ages, and it finally came to Charles V, who presented the island to Duke Cosimo of Florence, who fortified Porto Ferrajo in the sixteenth century, constructing Forts Stella and Falcone on the heights commanding the harbor entrance. The French got possession in 1801, and Napoleon united Elba with the new kingdom of Etruria, which he then formed on the Italian shore. In 1814, upon Napoleon's abdication, the island was made into a special sovereignty for him, and he came here in

May. The Villa San Martino, which he occupied, is now the show place of Porto Ferrajo, on the hill between the forts, and contains a museum of Napoleonic relics. During his brief sovereignty, Napoleon constructed a road through the mountain passes to Porto Longane, on the eastern shore, near the iron deposits, a picturesque stronghold which the Spaniards first built. Napoleon remained in Elba until February 26, 1815, when, having fomented discontent in France, he sailed away over the northern sea, landed at Cannes, had a triumphal march to Paris and conducted his wonderful "Campaign of the Hundred Days" that ended with his final overthrow at Waterloo. Then Elba reverted to the Grand Duke of Tuscany, and it is now part of the Kingdom of Italy. Elba is the chief island of what is known as the Tuscan Archipelago. To the northwest is the small wine-growing island of Capreja, the "Isle of Goats," a name coming down from the Roman days, and farther off is sterile Gorgona, inhabited also by wild goats, with a few fishermen. About seven miles southwest of Elba is the low and comparatively level island of Pianosa, anciently named Planasia, because of its flatness, and to which the Emperor Augustus banished his grandson Agrippa Postumus. The granite rock of Monte Cristo, about six miles in circumference, and having the ruins of a monastery which Barbarossa's pirates destroyed, is twenty-five miles south of Elba. A submarine ridge

runs eastward from it to the Italian shore, where it rises into the imposing promontory of Monte Argentario, extending far into the sea, and almost detached from the land. The summit of Monte Cristo has two peaks, about 2,100 feet high, on one of which is a monastery. Directly in front, and about nine miles away, the submarine ridge rises in the mountain island of Giglio, elevated 1,700 feet. This was the noted Roman summer resort of Igileum and there are ruins of various palaces of that time.

Farther down the Italian coast is the group of Pontine or Ponza islands, between Sardinia and Italy, a half-dozen volcanic formations, which are still used as in the Roman times, as a place of banishment for convicts. The best known is Ventotene on the eastern verge of the group, the Roman Pandataria of melancholy fame, whither Augustus sent his abandoned daughter Julia, and Tiberius banished Agrippina the daughter of Julia, and Nero his wife Octavia, whom he had divorced. About twice a week a steamboat comes out to these islands from Naples.

The magnificent mountain-enclosed Gulf of Naples is guarded on either hand by noble promontories, each having in the offing famous islands. Cape Miseno on the western verge has extending beyond it and evidently part of the same formation, the island of Procida and farther out Ischia, both of volcanic formation, while Point Campanella at the

southeastern verge, the rock on which Ulysses built his Temple of Minerva, has three miles out at sea, the celebrated Capri isle. The island of Procida, the ancient Prochyta, was gradually built up of pumice stone and lava, cast out of three craters, one now forming the gorge of a creek, while the other two, which are much larger, have had their margins on one side washed away by the action of the sea, and make two spacious semicircular bays on the Italian side of the island. Originally there was another larger crater, through which the sea has completely washed, and has thus detached from Procida the little olive-clad island of Vivara, on its western side. Procida is about two miles long and has a large population who cultivate it thoroughly, raising fruits and wines. Its town of Procida is on the northeastern shore, the glistening, white flat-roofed houses contrasting with the environment of green, as the steamer approaches, and the old defensive castle on the extremity of the island being the most conspicuous structure. This castle which has a fine view of the Gulf of Naples is now a prison.

Beyond Procida is beautiful Ischia, its splendid hills rising behind the town and castle of Ischia, and culminating in the noble summit of the Epomeo, elevated 2,800 feet, near the centre of the island, now an extinct volcano, whose eruptions in past ages substantially formed it. The town stretches along the shore of a pretty bay, having out in the sea at the

southern edge, a picturesque castle on a high and isolated rock of volcanic tufa and ashes. Alfonso I of Naples built it in the fifteenth century, and a stone pier, connecting the rock with the land, partially protects the harbor. The town has about seven thousand inhabitants, and the island twenty-five thousand, who cultivate wines and fruits, and some also get a livelihood by fishing, while from remote times they have made *mattoni* (tiles) and other pottery from the gray clay found here. Ischia was the ancient Pithecusa and Ænaria and the Iscla of the middle ages. Its coasts are steep and rocky, and its form an oblong, about twenty miles around, the valleys being of unusual fertility. The massive Epomeo has encircling it, twelve other and smaller extinct volcanoes, and the scenery of intervening mountain and vale is very beautiful. This volcano, the Epomeus of antiquity, was in active operation in prehistoric times, and much earlier than its neighbor Vesuvius, on the mainland of Italy. Because of the repeated eruptions, the early Greek colonists deserted the island in the fifth century B. C., and several severe eruptions also occurred during the Roman era. The mythological story was that the giant Typhœus, transfixed by the thunderbolts of Jupiter, was buried beneath the mountain, his sufferings causing periodical groanings, uproar and fearful outbursts of fire. The last eruption was in 1302, and it is believed that the volcanic activity was then

transferred to Vesuvius. The great lava stream, then descending to the sea near Ischia, can be readily traced, not yet being fully covered by the vegetation. A terrific earthquake occurred in July, 1883, which broke a large mass from the mountain, and for awhile visitors shunned Ischia, but now they are returning. The island has been part of the Neapolitan kingdom (now Italy) since the thirteenth century. Ischia was the birthplace of the Marquis Pescara in 1489, and his widow Vittoria Colonna, famous for her talent and beauty, retired to the castle in 1525, to mourn his loss. She was the poetical friend of Michael Angelo.

Ischia, from the most remote period, was noted for its warm springs and bathing. A road crossing the lava stream of 1302 leads northward to Porto d'Ischia, one of the bathing establishments, with warm salt springs. The circular harbor, which is an extinct crater, was formerly a lake, but an opening has been made to the sea, that gives access to vessels. About three miles away, on the northern coast, and on the lower slopes of Epomeo, are the warm alkaline and saline baths of Casamicciola, the most famous on the island. This town was almost entirely destroyed by the earthquake of July, 1883, but has been rebuilt by the government, and has many visitors between May and August. The principal spring, the Gurgitello, rises on the foothills of the mountain, at a small elevation, with water at

147° temperature. In the suburbs is the Campo Santo, where the seventeen hundred victims of the earthquake were buried. At Lacco, to the westward, are more hot springs, providing vapor baths, rising in the gardens of a former monastery. The Church of Santa Restituta, the patroness of Ischia, is in the village. On the western coast is Forio, the chief town, with about eight thousand people, and a little port where passing steamers touch. From everywhere, the island is dominated by the massive Epomeo, rising almost perpendicularly on the northern side, but falling off more gently on the other slopes. Hewn in the volcanic tufa rock of the summit is the Hermitage of San Nicola, and from a Belvedere, on the pinnacle of the mountain, there is a superb view over the blue Mediterranean, and the Italian coast bordering the Gulfs of Gaeta and Naples, with their background of noble mountains, Vesuvius smoking in the distance.

CAPRI.

Off the southeastern verge of the Gulf of Naples, beyond the bold Point of Campanella, is another "island of goats," the ancient *Capreæ,* which came in time to be called Capri the "Isle of Sirens." This famous island is not very far from the mainland, and in the approaching view, it appears as a cluster of dark mountain summits. It is of most picturesque outline, bounded by imposing and often

fantastic coast cliffs, and covers barely six square miles of surface. This mountain mass is so well enclosed, that at only two places can boats land the visitors, while on the eastern side the huge cliffs rise nearly a thousand feet, almost vertically from the sea, and the rugged island culminates toward the west, in the summit of Monte Solaro, elevated 1,920 feet. From the landing place up to the town of Capri, on the eastern side, is a climb by devious paths among the rocky precipices, while to the other village near the western side — Anacapri — the route is steeper still, the road winding through the defiles, and displaying gorgeous scenery. There are about six thousand inhabitants of this most attractive island, of which Capri and Anacapri are the chief villages, and in recent years it has become a popular resort of tourists, one of whom however has written that "the industries of Capri are fishing, especially for coral, vine-dressing, and begging — the last being pursued with great diligence." It was the summer and winter retreat of the Roman Emperors, Augustus and Tiberius, who lived here in every luxury and indulgence, the latter especially practicing the most frightful cruelties and excesses, and here were sown the early seeds that produced the conditions leading to the decline of the great Roman Empire. Capri came under historical notice in the reign of Augustus, who made it his favorite retreat, constructing palaces, baths and various public works. He

first visited the island 29 B. C., when he was about thirty-three years old, and he died in the year 14 A. D. Tiberius, who was born 42 B. C., was his stepson, and was made heir and successor, becoming Emperor when fifty-six years old. He made Capri his favorite abode, building here twelve villas, in honor of twelve of the Roman deities, the greatest being the Villa Jovis. In the year 27 A. D. he finally retired permanently to Capri, where he lived for ten years until his death in March, 37, at the age of seventy-nine. Much of the structures reared by these Emperors still exist. Capri became, in the time of Tiberius, the scene of the most horrid excesses and debauchery, and his favorite Sejanus, who induced him to give himself up to a life of sensual pleasures, and held the reigns of government at Rome during his retirement, did not hesitate to incite in his half-crazed master, the worst cruelties and licentiousness. Tiberius became the most wretched of men, suffering all the torments of excessive dissipation. Finally, he found that Sejanus was plotting to become Emperor, and got the Senate to have him killed by strangulation A. D. 31, the populace tearing his body to pieces. When Tiberius came to death himself, bent double and inflicted with a myriad ills, the people hailed their deliverance with delight. During his reign Christ was crucified at Jerusalem, and this has always been regarded as bringing a judgment on Tiberius. High above the

water, on the northeastern cliffs, are the ruins of the villa where he lived, and the legend is that from the brink of a neighboring precipice, the tyrant hurled his victims into the sea.

The usual landing place is at the beach of the Marina Grande, in a small bay on the northern shore, and from here the steep routes ascend to Capri and Anacapri. About half the population live in Capri, which is the capital, and is at nearly five hundred feet elevation. Hills surmounted by ruins surround the village, on one of which is the old castle, the Castiglione, which was the defensive fortress in the middle ages. The jutting northeastern promontory was the site of the Villa Jovis, and is known as the Capo, and here is the bold rock elevated 745 feet, the Salto di Tiberio, from which the legend says Tiberius threw his victims. There is now a platform on its summit, with a railing, from which a stone may be dropped into the water far below. Alongside are remains of the ancient lighthouse, which was the beacon on the cape. There are extensive ruins of the villa, mostly vaulted corridors and chambers, used as stables for cattle, and on the highest point, a small chapel with a hermit's cell, there being an admirable view across the blue sea to the barren rocky Point of Campanella, and the coasts of Italy with their noble mountain background. The limestone rocks, forming the cliff walls enclosing the island, have been here worked out by the water

Capri, the Landing Place.

into arches and grottoes, and down by the waterside is the Grotto of Mitromania, which was the famous shrine of Mithras, "the god of the sun," worshipped throughout the Roman empire during the time of the later Emperors. Turning inland, the route to Anacapri mounts to higher elevations in its elaborate windings, constantly disclosing beautiful views. Over it frown the ruins of the medieval Castle of Barbarossa, which has been named after the Barbary pirates, who destroyed it in the sixteenth century. Besides this winding road, an ancient flight of about seven hundred steps leads up to Anacapri, where live most of the other inhabitants of the island. This village is scattered over a comparatively level plateau, sloping toward the west, at nearly 900 feet elevation. To the southward rises the highest surface of the island, culminating in Monte Solaro, which ascends abruptly from the southern sea, its summit crowned by a ruined castle. Here is a magnificent view all around the horizon, with sea and land spreading away in all directions, the Italian Campagna being enclosed in the distance by the grand background of the Apennines.

The prevalent limestone rocks of Capri have been worn by the sea and weather into the strangest forms, so that gorges and caves are numerous. All around the precipitous coasts are splendid rock formations, and there are grottoes in white, yellow, green and blue, the most famous being the Grotta Azzurra, or

"Blue Grotto," on the northern coast about a mile westward from the Marina Grande. It is a beautiful voyage by boat along the bases of the precipitous rocks, passing the practically submerged ruins of the Baths of Tiberius. The entrance to the cave is barely three feet in height above the water, but within, the roof rises to over forty feet in height, and the cave is a hundred feet wide and nearly two hundred feet long. This grotto is said to have been connected with one of the villas of Tiberius by a passage through the rocks, but the grotto seems to have been entirely forgotten during the middle ages, and was not rediscovered until 1826. The low and narrow gateway passed, the visitor is in a fairy hall. The daylight is excluded from everywhere, excepting by the illumination refracted through the small opening, the light being internally reflected from the very clear waters. The effect of the blue refraction of the light is most exquisite, and at first the eye is completely dazzled. Everything is tinged with silver and blue. Sapphire lights twinkle from the rocky roof, and go glancing down into the watery depths. A stone thrown in makes myriads of brilliant blue bubbles. The dripping oar becomes a blade of frosted silver tinged with blue. A boy jumps into the water for a small fee, and he is at once encased in the most gorgeous suit of blue and silver armor, set with brilliant jewels. The boatmen row the visitor all around the island, and to other

grottoes, among them the "Green Grotto" in the base of the towering Monte Solaro, displaying similar gorgeous views in brilliant emerald green. The cliffs are noble, many of them wrought into interesting forms, and among the most majestic are the Foraglioni, near the town of Capri, where the central cliff has a grand archway through which the boat passes. But the "Blue Grotto" is the gem of the much admired island, and William Gibson thus sings its praises:

Many an archéd roof is bent
Over the wave,
But none like thine, from the firmament
To the shells that at thy threshold lave.
What name shall shadow thy rich blue sheen —
Violet, sapphire, or ultramarine —
Beautiful cave?

Blue — all blue — may we not compare it
With Heaven's hue,
With the pearl shell, with burning spirit,
Or with aught that is azure too?
No! for in ghostly realms alone
Is the like of thy lustre shown —
Cave of blue!

CAMPANIA

VII

CAMPANIA

Gulf of Salerno—Pæstum—Salerno—Monte St. Angelo—Amalfi—Capri—Campanella—Bay of Naples—Portici—Resina—Herculaneum—Torre del Greco—Castellammare—Stabiæ—Meta—Sorrento—Cape of Minerva—Phlegræan Fields—Pozzuoli—The Solfatara—Monte Nuovo—Lucrine Lake—Lake Avernus—Cumæ—Baia—Cape Miseno—Ischia—Parthenope—Naples—Grotto of Posilipo—Virgil's Tomb—St. Januarius—Vesuvius—Pompeii—Byron's Invocation to Italy.

THE GULF OF SALERNO.

The approach to the bay of Naples, of which Ischia and Capri are the outer guardians, is beautiful. This is Campania, its coast strikingly bold and rocky, being carved into deep bays guarded by noble headlands, and dotted with historic places. The hilly Campanian district, including Salerno and Naples, is largely volcanic, extremely fertile, and has a most equable climate, the people being so proud of its attractions, that they call it *Campagna felice*. On the shore of the Salerno Gulf, are the remains of Pæstum, now called Pesto, the Greek city of the sixth century B. C., which the Romans extolled for its rose gardens, none now existing however. But amid the ruins, still grow wild some of the famous

Pæstum roses, rich in perfume, and blooming twice a year. This was the ancient Poseidonia, the city of Poseidon or Neptune, on the border between Campania and Lucania. The Moslems destroyed it in the ninth century, and it afterward fell into decay, the locality being malarious, and the green plain along the sea was almost entirely abandoned. There remain, however, the massive Doric temples, which are regarded as the best survivals of Greek architecture outside of Athens. These are the Temple of Neptune, 190 feet long, with thirty-six massive columns, 28 feet high and over seven feet in diameter; the Basilica, 180 feet long and having fifty columns; and the smaller Temple of Ceres, 105 feet long, with thirty-four columns. There are extensive and well-preserved ruins of towers and walls, enclosing a space about three miles in circuit, one of the tower gateways, fifty feet high, being almost perfect, and all about are indications of this great city of the Greeks.

At the head of the Gulf, and rising steeply on the hill slopes is the old town of Salerno, the ancient Salernum, also a Greek settlement, famous in the middle ages as the greatest medieval school in Europe, but now depending, for its chief celebrity, upon its venerable Cathedral of St. Matthew, built in the eleventh century by the Normans, and the tradition says, on the spot where his remains were interred,

Amalfi.

after having been brought here from the East in the year 930. This is a region of limestone cliffs, and the white houses of Salerno are gathered along the shore and slopes, overlooked by the gray old castle of the Lombards, crowning the projecting ridge, at 900 feet elevation. These hills sweep around southward in graceful outline, far away to the Point of Licosa, blue in the distance, beyond the green plain of Pæstum. The ruins of this ancient city were freely drawn upon for materials for the Salerno Cathedral, its front having an atrium surrounded by twenty-eight antique columns, while there are many venerable sarcophagi, which originally held the corpses of noble Romans and Greeks of Pæstum, but were brought into the cathedral, with their pagan ornamentation unchanged, for the later burial of prominent Christian counts and prelates.

The northern verge of the Gulf of Salerno, is the long and elevated ridge of Monte St. Angelo, the Sorrento peninsula, extending westward to the abrupt promontory of Point Campanella, beyond which is the beautiful island of Capri. The summit of St. Angelo is the most elevated height around the Gulf. Along the face of the limestone cliffs is constructed a wonderful road, which can be traced from Salerno out almost to the Point, hewn in the rock, supported by galleries and going over airy viaducts, now up, now down, cut out of the cream-

colored limestone, covered by shrubbery in places, and having dotted along it, here and there, picturesque white villages of flat-roofed houses, perched among the crags, and apparently guarded by the old time martello towers, once used on these coasts as a protection from pirates. Upon this road, about midway between Salerno and the Point, is the famous haunt of artists, Amalfi. A deep ravine opens out to the sea, rocks rise precipitously on either hand, and the little town, wedged into the gorge, also runs up the cliffs, and stretches out over a diminutive beach in front, where in times past, a good deal of the place stood, but has been engulfed and washed into the sea. Narrow paths are hewn into the face of the rocks, sometimes supported on arches, and terraces are built up in walls to give a chance to plant the vine, the orange and the lemon. On top of all, from a prominent crag, an old round tower looks out over the water. A stream rushes down the ravine, receiving little brooks from either side, and here are numerous old mills that make paper, while the people also manufacture macaroni and soaps. In a superb situation on the hill, at 230 feet elevation, with a grand outlook, is the old Capuchin monastery, now used as a hotel. Pæstum has contributed building materials here also, and there are Roman sarcophagi and columns in the Cathedral of St. Andrew, where they are said to have in the crypt the body of the apostle, which was brought from Con-

stantinople in the thirteenth century. Everywhere are gems of scenery that attract the artists from all over the world.

THE MAGNIFICENT BAY.

The approaching steamer crosses the wide Gulf of Salerno, and heads for the strait, through the opening broken down between the bold promontory of Campanella and Capri beyond. This high and rocky island has the brilliant morning sunlight shining upon its steep shore, up which the zigzag road runs between the villages at base and summit. The steamer sails between the island and the mainland and then the beautiful Bay of Naples is opened, with that noted city on its distant northern shore, and Vesuvius with the rising smoke column far off to the northeastward. This renowned bay, one of the most beautiful existing, is twenty miles across, having the outlying islands of Capri and Ischia [1] guarding its extremities, and is surrounded by a magnificent girdle of mountains, being indented fully fifteen miles into the Campania coast. As the steamer glides northward over the bright blue waters, the grand semicircular sweep of the enclosing mountains is impressive. Off to the northeast, in the middle of the semicircle, and the dominant feature of the splendid scene, is the double cone of Vesuvius,

[1] The islands of Capri and Ischia are described in the preceding chapter on "Islands of the Sea."

backed by the distant snowy summits of the Apennines. From the level plain to the right of Vesuvius, there extends grandly out southwestward, the projecting rocky limestone peninsula of Sorrento, with majestic Monte St. Angelo its culminating summit, the ridge descending abruptly to the bold headland of Campanella that has just been passed. At the base of the cliffs, along the bay, and in their gorges, nestle a group of villages, prominent among them being Castellammare, Meta and Sorrento. To the westward of Vesuvius, there spreads a series of hills, having part of Naples built on their spurs, but they appear totally different from the limestone formation to the southward, being a series of long curving ridges and low flat-topped cones. These extend to the volcano of Monte Nuovo, over near the sea, and terminate in the bold headland guarding the northwestern verge of the bay, beyond which is Ischia with its grand Monte Epomeo. This group of volcanic hills forms the famous Phlegræan fields of the ancients.

As the steamer swiftly moves northward over the water, there gradually develops with the nearer view ahead, a white mass looking much like a spacious marble quarry, having a long low white line running off southeastward to the base of Vesuvius. This, on approaching, gradually dissolves into Naples, and on the right hand side, into the almost continuous line of villages extending along the curving shore be-

tween Vesuvius and the sea, which various eruptions and destructions have made familiar to the world, in the names of Portici, Resina and Torre del Greco. The white mass of the city, stretching from the water's edge up the slope, culminates in the Castle of St. Elmo, crowning the ridge overlooking Naples, and a striking object in the scene. But the dominant feature of all is Vesuvius, its lower slopes a rich carpet of gardens and foliage, having high above the gray and broken encircling cliffs of Monte Somma, and the loftier cone of ashes upholding the crater, from which rises the steam and smoke cloud blown away slowly by the wind. Creeping down the flanks of the mountain are dark stains that spread out in deep purple amid the verdure below, the lava torrents which in past times have overwhelmed the stricken villages. This grand bay of Naples presents one of the most gorgeous views in Europe, and it is no wonder that the enthusiastic sons of Italy, beholding it, made the proverb which has become one of the city's mottoes, *Vedi Napoli e poi mori!* —"See Naples and then die."

The villages that fringe this splendid bay are interesting. Portici is the railway station for Resina near by, which is built over the lava beds and scoria that in the first century of our era engulfed Herculaneum. This was the Grecian Heracleia, said to have been founded by Hercules. It became a favorite site for the villas of wealthy Romans and was

totally destroyed by the first eruption of Vesuvius in the year 79. Subsequent eruptions buried it to a depth in some parts of one hundred feet of lava and ashes. In 1719, the sinking of a well revealed the site of the ancient theatre, about eighty-five feet below the surface. Extensive excavations have since been made with interesting results, and many relics were removed to the museum in Naples. The excavations were renewed in 1907, under the auspices of the Italian and other governments, upon a plan involving the purchase of the surmounting buildings of Resina, so that the whole ancient city may be ultimately uncovered. Herculaneum was alongside the sea originally, but the later lava streams have extended the shore line. It is exactly in front of Vesuvius. The railway train moving beyond it, crosses the great lava stream of 1794, about a half mile wide and forty feet thick, and comes to Torre del Greco, which is built upon the earlier lava streams of 1631, that destroyed the greater part of the older town. The eruptions in 1737, 1794 and 1861 greatly damaged the place, and it was rudely shaken by an earthquake in 1857. The showers of ashes, the flow of lava, the upheaval of the ground, and the fissures that opened, did their destructive work, but could not frighten the people away, as they always returned and rebuilt their houses. The vast mass of Vesuvius overhangs the village, its entire base being covered by the marks left from these catastrophes.

Beyond, stretches southeastward the splendid peninsula of Sorrento, indented by various bays, the first being that of Castellammare. This town is on a spur of Monte St. Angelo, and is built over ancient Stabiæ, which was destroyed at the same time as Herculaneum and Pompeii. Here perished the elder Pliny, while observing the eruption, being suffocated by the ashes and sulphur fumes. Some excavations were made in the eighteenth century, but the work has been abandoned. The town, having over thirty thousand people, extends more than a mile along the beautiful curving bay, and has a busy harbor and a dockyard. The ruins of the old thirteenth century castle, which gave the place its name are high on the hill to the southward. This is a favorite summer resort of the Neapolitans, and the entire neighboring coast has many American and English winter visitors. The road leading beyond, is carried along steep rocky slopes, sometimes down near the sea, and then high on the cliffs, with long circuits inland, rounding the deep ravines. High above rise the limestone crags, clothed with olives, and the road goes over the bold promontory of the Punta di Scutolo, almost overlying the sea, having a little tower perched at its end. Then the route descends toward Meta, with the beautiful Piano di Sorrento beyond, a luxuriant plain sheltered among the mountains, a sort of shelf, sloping gently down from the bases of rugged limestone crags, and termi-

nating abruptly above the sea, in steep cliffs of dark rock. From its groves and orchards rise groups of pink and white houses. Far over the sea are views of the grand bay, of Capri's rocks and the distant mountain of Ischia, with the smoking crater of Vesuvius always in sight. Meta stretches along the sand, around two little harbors, its Church of the Madonna being built where once was a temple of Minerva, and its deep ravine incised back boldly into the side of Monte St. Angelo, rising 4,735 feet above, the highest summit around the Bay of Naples, and commanding a superb view.

Up from the strip of beach along the water, rise the old buildings of Sorrento, anchored on crags and nestling amid the rocks. Its hotels are in gardens on the cliff terraces, and have private stairs descending to the sea where there are bathing houses. This is ancient Surrentum, in a splendid situation, and is called by the people *La Gentile.* Here was born the poet Tasso in 1544, and the public square is adorned with his statue, but the house where he saw the light and the rock on which it stood, have been engulfed by the sea. The road beyond goes out to the promontory, at the extremity of the peninsula, the bold rock overgrown with olives and myrtles, now crowned by a lighthouse, which was the ancient Cape of Minerva, so called because Ulysses here erected a temple in her honor. The modern name of the Punta di Campanella, has been given from the

The City and the Bay of Naples.

bells of its watch-tower, erected by Charles V as a protection against the Barbary pirates, who continued their raids on this coast until the early nineteenth century. Its western outlook is upon Capri, about three miles away.

Upon the northern shore of the Bay of Naples are the volcanic Phlegræan Fields, where were made the first Grecian settlements in this region, the poems of Homer and Virgil investing them with special interest. To the westward of Naples, its tall houses appearing in various colors, and clustered on a steep headland, is Pozzuoli, where St. Paul on his journey to Rome, "found brethren," and was "desired to tarry with them seven days." It was then the chief trading seaport of Italy, called Puteoli, and the special port of Rome, but it is dilapidated as well as picturesque now, though the broken masses of masonry down in the water, which are all that remain of the piers of the Mole of Caligula, testify to its maritime greatness in the Roman days. It is full of the ruins of that time, and in the public square they have the statue of a Roman senator, headless when found in the ruins, but on which they have ingeniously put another statue's rescued head so as to complete it. The cathedral occupies the site of a Temple of Augustus, some of its Corinthian columns still standing. There are ruins of temples of Serapis, Diana and Neptune, and also a fine amphitheatre, which was excavated in 1838. It was

here that Nero had gladiatorial contests, and Diocletian sent St. Januarius into the arena to be devoured by wild beasts, but they refused to rend him, whereupon he afterward suffered martyrdom outside the city gate, and became the patron saint of Naples. All about this neighborhood are volcanic craters, and vents whence steam jets and mephitic vapors emerge, the chief being the Solfatara, on the edge of the town, a crater enclosed by hills of pumice stone, and having various fissures. This had its last eruption in the twelfth century, but the volcanic forces are still working in the hollow ground beneath, and health-seeking patients climb up to it, and sit in the hot and bad-smelling sulphurous vapors, which give relief in cases of consumption and asthma. Much of the ruins of Pozzuoli have been lowered under the sea level by earthquake and volcanic convulsions. Here lived Cicero in the villa Puteolaneum and composed some of his works, while Hadrian died and was temporarily interred here.

To the westward rises the volcanic cone of the Monte Nuovo, about 450 feet high, this "new mountain," in the form of an obtuse cone with a deep crater, having been suddenly upheaved by a violent earthquake on September 30, 1538. Close by is the Lucrine Lake, adjoining the sea, with an ancient embankment under the water, across which the tradition says that Hercules, in one of his labors, bringing the oxen of Geryones from Erythia, drove

them through the swamps; while inland about a half-mile northward, is the famous Lake Avernus, filling an old crater, embanked by lava covered hills and about two miles in circumference. The sombre environment of this dismal lake, caused the ancients to regard it as the entrance to the infernal regions, and such were its mephitic exhalations, that no bird could fly across it and live. The guides show now the "Grotto of the Sybil," and another small opening, which they say is the actual "Entrance to Avernus." This lake was connected with Lucrine by the Romans, and made a naval harbor, much extolled by Virgil and Horace, but the upheaval of the Monte Nuovo destroyed all their work, and also half filled up Lucrine with debris. The legends tell us that this, in the remote past, was a region of the gods and sirens to whom Ulysses came for counsel. Homer describes it as the abode of the dismal, sunless Cimmerii. Virgil tells how Æneas came from Troy to visit the Sybil of Cumæ, and descended with her, through the dark groves on the bank of Avernus, to the lower world. There is a project now afoot, to again connect these lakes with the sea, and establish shipbuilding yards and docks, for which purpose a Belgian syndicate bought the territory in 1908.

Over the hill, on the outside of the peninsula, and adjoining the sea, are the remains of Cumæ, the Greek Kyme, the first settlement on this coast, founded in the eleventh century B. C. From here

Rome got the mysterious sibylline books. It was an important seaport at first, but declined after the Romans took it, and was destroyed by pirates in the thirteenth century. Fragments remain of the walls and the Acropolis, the rock on which this castle stood being perforated with many passages, leading in every direction. This is believed to have been Virgil's "Grotto of the Sibyl," which had a hundred entrances, "whence resound as many voices, the oracles of the prophetess."

To the southward, the peninsula narrows, and here on a deep indentation of the bay is Baia, the ancient Baiæ, overlooking the magnificent Bay of Naples, and in its day of greatest prosperity the most famous watering place of Rome, but now a little village trying to regain some importance as a seaside resort. Here came Augustus, Nero and Hadrian, and it was then a centre of the greatest luxury and profligacy. Horace describes in his first epistle, a wealthy Roman, who wishes to build a splendid villa here, and exclaims "Nothing in the world can be compared with the lovely bay of Baiæ." A little way south is the Villa Bacoli, on the coast, where Nero in 59 A. D. plotted the murder of his mother Agrippina, a crime soon carried out at her villa on the Lucrine Lake, and his tomb was near the villa of Julius Cæsar on the heights above. Beyond is the site of Misenum, where Augustus established his naval harbor in connection with the works at Lucrine

Lake, the town having long after been destroyed by the Saracens. Here was the villa of Lucullus, where Tiberius afterward died. The peninsula ends in the promontory of Cape Miseno, an isolated mass of tufa-rock, rising 300 feet, and connected with the mainland by a narrow strip of coast, stretching between the sea and a lake, and fully a mile long. This peculiar rock of Miseno, looking like an ancient tumulus, was described by Virgil in the *Æneid,* as the burial place of the trumpeter Misenus, whence came the name. It is surmounted by a lighthouse and a picturesque watch-tower of the olden time, and from the summit has a grand outlook over the water and the land, with the pointed summit of Monte Epomeo on Ischia, out in front. Ovid in his *Metamorphoses* tells of the journey of the god of healing, who came to Rome through this charming region.

> Minerva's Cape they leave, and Capreæ's isle,
> Sorrentum, on whose hills the vineyards smile,
> The city, which Alcides' spoils adorn,
> Naples, for soft delight and pleasure born,
> Fair Stabiæ, with Cumæan Sibyl's seats,
> And Baiæ's tepid baths and green retreats.

THE CITY OF NAPLES.

After the ancient Cumæ had existed for some time, a Greek colony migrated across the peninsula, and founded on a spur of the hill of St. Elmo, a new settlement, called, according to Pliny, Parthenope, after the tomb of a Cumæan siren of that name.

This colony, receiving accessions from Greece, and spreading in the progress of years, came to be known as Neapolis or the "new city," while the original settlement was called Palæopolis, or the "old city." Thus began the name of Naples, the population continually enlarging by further arrivals from Greece. The Romans conquered it, in the fourth century B. C., and its attractiveness drew many of the Roman magnates hither. Lucullus possessed gardens, where the city is now built, and in them in the year 476 A. D., died Romulus Augustulus, the last feeble monarch of the Western Roman empire. All the Roman emperors were residents, and most of them benefactors of the city, while Virgil lived in the suburbs, completing here some of his last works. In the fifth century of our era, the barbarians attacked and devastated the town; it fell before Belisarius; and the Goths also took it by storm. Then it became independent, and was ruled by its own Dukes for several centuries, until captured in 1130, after a long siege, by the Norman Roger. Charles of Anjou made it the capital of his kingdom, it afterward fell to Ferdinand of Aragon, was ruled in the sixteenth century by Don Pedro of Toledo as viceroy, and in the eighteenth century it came to the Bourbons. All these princes greatly extended and embellished the city. Resisting the despotic control of Ferdinand (Bomba), in the nineteenth century, it rebelled under Garibaldian inspiration. Bomba was

overthrown, and Naples was annexed to the newly formed kingdom of Italy. The population is about a half million, its antiquities are few, but it retains several picturesque castles of the middle ages.

The landing, after crossing the beautiful Bay of Naples, and passing the fine lighthouse on the Molo, the latter dating from 1302, produces a sad disappointment. The city has little attraction in the lower districts, and the noisy and wrangling boatmen, put the visitor ashore at a poor little quay, surrounded by dirty streets and squalid quarters, with squabbling porters and cab drivers, numerous beggars and a scene of wretchedness, noise and general demoralization, which for the moment, gives a more serious meaning to the proverb: "See Naples and then die." Most of the people seem to live in the streets. The view after landing is not very satisfactory. The Castle of St. Elmo was impressive on the approach, and there was a picturesque flavor in the quaint Castello dell' Ovo, so called from the oval shape of the rock on which this old-fashioned fort rises from the sea to defend the dockyard in front of the town. But the houses themselves are generally uninteresting, and to an extent monotonous in outline, being mostly oblong constructions of masonry, with flat roofs, excepting where an occasional low dome may rise, giving a slightly oriental aspect. There appear only a few towers, high domes or steeples rising above the general level.

The Castello dell' Ovo was begun in the twelfth century, but was practically completed in its present form, by the viceroy Don Pedro of Toledo, about the middle of the sixteenth century, and is now a barrack. The small rocky island on which it stands, to the left of the harbor, was the Megaris of Pliny, and is the outlier of a range of hills, dividing Naples into two unequal portions. The Pizzofalcone hill, on which was the Palæopolis, rises behind this island, and from it the ridge ascends northeastward, into the heights of St. Elmo, elevated 875 feet above the sea, where is the impregnable fortress of the Castello Sant' Elmo, built by the Normans and their successors, and now a military prison. Funicular railways ascend the hill slope to it from the lower town. Thence northward, the surface further rises to the eminence of Capidomonte, where, in an attractive garden, is a Royal Palace, which is now a museum of paintings, porcelains and ancient armor, and on this elevation are the water reservoirs for the city, while the summit is crowned by an astronomical observatory. Here was the Royal Porcelain factory established by Charles III in the eighteenth century, which was abandoned in 1820. The hills rise higher toward the northwest, and there, at 1,500 feet elevation, is the old monastery of Camaldoli, giving the most charming outlook near Naples. The city, which fronts for about three miles on the bay, and spreads inland northward for

two miles, over the plain and the hills, is thus divided into a higher and a lower town. To the eastward of the ridge of hills, and on the lower ground, is the greater part of old Naples, while the newer part is on the western hills and their slopes, facing the bay to the southward. In the older town, a large population is closely crowded, and the narrow streets are lined with very high buildings, that are tenement houses, with families on every floor and in almost every room. The children swarm the streets below, and the goats, that are the property of the people, wander about at will, and are accustomed to going up stairs in these tenements to be milked, sometimes to the sixth or seventh story, and the clatter of the hoofs upon the stairs, the Neapolitans say, is quite musical.

Along the eastern bases of these hills, is the chief street of Naples, the Toledo, running from the harbor northward to the heights of Capidomonte. This street has various names, and is the main artery of traffic, always presenting a busy scene. Its construction was begun in 1540 by Don Pedro of Toledo, but since the unification of Italy, it has been officially named the Via Roma. Midway in its course is the great National Museum of Naples, where are collected the archæological relics of Herculaneum, Pompeii and other places, besides a vast number of treasures from Rome and elsewhere throughout Italy. Down near the shore there goes

westward from the Via Roma the broad carriage road and promenade of the Chiaja, in front of which is the spacious and tasteful pleasure ground of the Villa Nazionale, facing the sea. Near the centre of this stands the large white building of the famous Aquarium, one of the best in the world. Back on the hill slopes are villas and hotels, having a grand outlook over the splendid bay. To the westward of this district, the rocky ridge again projects to the shore in the bold promontory of the Mergellina, through which is excavated a tunnel, a half mile long, called the Grotto of Posilipo. This passage has existed since the time of Augustus, having been mentioned by Seneca, in the reign of Nero, as a narrow and gloomy pass, and being viewed with superstitious awe in the middle ages, as having been constructed through the agency of magical incantations by Virgil. Various sovereigns have improved it, and now it is forty feet wide and as high, the eastern entrance facing the city being much higher, and it is used by the railway and main road to Pozzuoli. Everything going through the tunnel makes a deafening noise, and it seems to delight the Neapolitans greatly, to beguile their passage within this cavern, by unearthly yells and howlings to awaken the echoes. In a vineyard on the rock above is the enclosure called the "Tomb of Virgil," who died at Brundusium in B. C. 19, while returning from a visit to Greece, when he expressed the

wish to be buried here, where he had lived and composed his works. Petrarch planted a laurel, and the tomb was in good preservation as late as the fourteenth century, but has entirely disappeared. It was described then as containing an urn surrounded by nine small pillars.

The shore of the bay of Naples turns northeastward on the eastern side of the Castello dell' Ovo, and here are the arsenal, dockyard and harbor of the port. This was formerly guarded by the Castel Nuovo, a massive work begun by Charles of Anjou in the thirteenth century, and subsequently enlarged, the outer walls and bastions having been removed in later years. This castle was, for a long time, the residence of the sovereigns of Naples. The entrance to the castle is through a lofty triumphal arch, regarded as the finest monument in the city, a Corinthian gateway erected in the fifteenth century, to commemorate the entry of Alfonso I of Aragon on June 2, 1442. Since the early seventeenth century, the sovereigns of Naples have resided in the newer Royal Palace, which adjoins the castle enclosure on the southwest, and overlooks the arsenal alongside the harbor below. The splendid façade of this palace extends nearly six hundred feet, and in its three stories of colonnades displays the Doric, Ionic and Corinthian architecture. Eight marble statues, in niches, represent the Neapolitan dynasties for eight centuries, beginning with Roger

the Norman, and closing with Victor Emmanuel the first king of United Italy.

Naples possesses about three hundred churches, of which the chief is the Cathedral of San Gennaro (St. Januarius) the patron saint, built on the northern verge of the older town, and standing on the site of a temple of Neptune, this cathedral being an edifice in Flamboyant Gothic, with lofty towers and pointed arches. Charles of Anjou began the structure in 1272, and it was over forty years building. An earthquake nearly destroyed it in the fifteenth century, but Alfonso rebuilt it, and there has recently been a thorough restoration. It contains the tomb of Charles I of Anjou, Charles Martel and Andreas, Kings of Hungary, Popes Innocent IV and Innocent XII, and other distinguished personages. The gem of the cathedral is the Chapel of St. Januarius. Its construction was due to a vow made during the plague of 1527, which the Saint is believed to have stayed, although the chapel was not built until the seventeenth century, and it then cost a million ducats, equivalent to about $1,125,000. The chapel is a Greek cross, the interior decorated with marbles and gold, and it has eight altars, magnificent doors, forty-two broccatello columns, and various paintings and frescoes representing scenes in the saint's life. Among the collections in the cathedral treasury are a silver bust of the saint executed in 1306, and in the tabernacle of the high altar, are

kept two small phials containing his blood. Beneath the altar, in the richly decorated crypt, is his tomb.

St. Januarius was born in 272, it is supposed at Benevento, sixty miles northeast of Naples, of which he became bishop about 303. He was beheaded by order of Diocletian at Pozzuoli, September 19, 305, and his remains were interred there, but the two small phials containing his blood, taken at the place of the execution, were preserved and afterward presented to Bishop St. Severus of Naples, who had his body brought from Pozzuoli to Naples during the reign of Constantine. It is said that on this occasion the liquefaction of the blood first took place. The body was taken to Benevento in the ninth century, but after some other removals, was on January 13, 1497, finally brought back to Naples with great pomp. The anniversary of his martyrdom, September 19, is the great festival day of the city. Many miracles were attributed, by the early church annalists, to the exhibition of the saint's robes on various occasions, in the staying of the plague and of eruptions of Vesuvius. It has long been customary to expose the blood to the veneration of the faithful, on September 19, the saint's festival day, on the first Sunday in May, marking the bringing back of the body to the city, and on December 16, which commemorates his protection of Naples from damage by an eruption of Mount

Vesuvius. On these solemn occasions, the bust of the saint is exhibited, clothed in magnificent vestments. The reliquary, containing the two phials, is an oval about two inches long and six inches wide, the sides being of glass, so that the phials are in plain view. These are of different forms, though of the same length, the larger one containing pure blood and the smaller one blood mixed with clay or sand. An observer, who watched the ceremony, in 1906, describes how the reliquary was brought out, and placed on the altar table before the congregation. The prelate, after looking at it, said to the people, "*Eduro!*" (it is solid). Then he exhibited it to them, reversing it to show that the blood was hardened. Afterward, the reliquary was brought close to the bust, but the liquefaction did not follow, and this movement was repeated, while many prayers were said, and a half hour elapsed. Finally the liquefaction came, and the reliquary was presented to each one near the altar, to be kissed. A most remarkable change had taken place; the dark substance, previously as solid as wax, and not affected by the motion of the reliquary, became red and almost limpid, and was then following the motion, as the phial was turned up or down; the blood also seemed to live and move, it bubbled, boiled and throbbed, like that in an artery, and had all the appearance of human blood. This liquefaction sometimes will continue for the week, during which the

ceremonies are repeated, and it has been investigated by many scientists without explanation. It is the great religious event in Naples.

Some other churches are of interest. Adjoining the cathedral is Santa Restituta, an earlier church of the seventh century, on the site of a temple of Apollo, of which some of the Corinthian columns are preserved, this having been the first Neapolitan cathedral. San Domenico Maggiore, built in the thirteenth century, after the cathedral, is the finest church in Naples, has twenty-seven chapels and twelve altars, belonging to the most distinguished Neapolitan families, many of these richly decorated. Its Chapel of the Crocefisso is the most noteworthy, containing a relief of the Miracle of the Crucifix, which, according to the tradition, talked to St. Thomas Aquinas, who lived in the monastery adjoining. He was professor of philosophy there in the thirteenth century, his cell and lecture room being still preserved. St. Thomas Aquinas was the famous religious instructor and author, whose services were so useful to Pope Urban IV. When at college, it is said that, from his bigness and usual silence, his fellow-students called him the "Dumb Ox." But the promptness of his answers, and the acuteness of his intellect, led the master one day to surprise them by remarking, "This dumb ox will give such a bellow in learning as all the world shall hear."

In Sante Chiara is the monument of King Robert the Wise, over forty feet high, and in Sante Maria del Carmine, that of Maximilian II of Bavaria. St. Giovanni a Carbonara contains the monument of King Ladislaus, behind the high altar, supporting the king's equestrian statue, a magnificent structure erected by his sister Johanna II. In Santa Maria la Nuovo is a chapel erected in 1604 by Gonsalvo de Cordova —"le Gran Capitan," his nephew Ferdinand having placed on each side of the altar, the monuments of his two most noted enemies, Novarro, who strangled himself, and the Frenchmen Lautrec, the general of Francis I, who died of the plague in 1528, while besieging Naples. In the monastery connected with Santi Severino e Sosio, are the valuable archives of the Kingdom of Naples, including 40,000 manuscripts, some of them as old as the seventh century, and written in Greek, and many volumes of documents. The frescoes here represent scenes in the life of St. Benedict, who planted in the central court a buttonwood tree, on which is grafted a fig tree. San Francesca di Paola, near the Royal Palace, has its high altar inlaid with jasper and lapis lazuli, thirty-two Corinthian marble columns supporting the splendid dome, and a special gallery for the royal family. In front of this church, are equestrian statues of Kings Charles III and Ferdinand I. In San Giacomo degli Spagnuoli, built by Don Pedro of Toledo, is his splendid tomb

behind the altar, adorned with reliefs representing his achievements, statues of the cardinal virtues, and having the viceroy and his wife in kneeling posture.

The University of Naples, founded by the Emperor Frederick in the thirteenth century, occupies the buildings of the Jesuits' College in the old town. It has a fine library and natural history collection, its faculties including about one hundred professors and there are usually five thousand students. New buildings are being constructed for it in the eastern suburbs. Naples is celebrated for its San Carlo Theatre, one of the largest opera houses in Italy, where most of the famous works of Donizetti, Rossini and Bellini had their first performances. This theatre adjoins the Royal Palace. During recent years, there have been great improvements made in the densely populated quarters of the old town, by opening new and wider streets, with modern buildings, this being done, both for the health of the people, and to secure better police protection. This older town is overlooked from the western hills, and the finest point of observation is from the high eminence of Camaldoli, to which there is a somewhat toilsome ascent. From this elevation of 1,500 feet, is got one of the grandest views in Italy, embracing the broad bay of Naples. and the regions far north and south, the city clustering around the heights of St. Elmo, which conceal

part of the lower town. The long western peninsula, beyond Pozzuoli, goes out toward Procida and Ischia; the grand southern barrier of the Sorrento peninsula, has Monte St. Angelo rising high above it, and Capri as its rocky outpost. The luxuriant plain, covered with delicious gardens and orchards, stretches from the city toward Vesuvius, and that massive cone, with its smoke column rising to the southeastward, is the sombre but dominant feature in all views at Naples.

THE GREAT VOLCANO.

Far, vague and dim,
The mountains swim,
While on Vesuvius' misty brim,
With outstretched hands
The gray smoke stands,
O'erlooking the volcanic lands.

Massive Vesuvius rises almost in isolation, from the plain to the eastward of Naples, its slopes coming down at the western base almost to the edge of the sea. It has a variable height, depending on the damage done to the cone by the successive eruptions. The summit gradually ascends when the volcano is quiescent, but an eruption usually blows off the top of the crater's rim. It has reached an elevation of 4,450 feet, but now rises about 4,075 feet, the last eruption in 1906 having reduced the height of the crater 375 feet. Around the northeastern base of the cone there is a crescent-shaped

ridge, called Monte Somma, of which the Punta del Nasone, the most elevated portion, rises 3,730 feet, thus being lower than the volcanic cone, and having between a semicircular valley, called the Atrio del Cavallo. To this valley, the sides of Monte Somma descend almost perpendicularly, while the cone has a slope of about 35°, the surface of the lower mountain having a more gradual slope. Vesuvius is the southeastern extremity of the volcanic district which embraces the Solfatara, Monte Nuovo and Mount Epomeo on Ischia, but the others have had no eruptions for three centuries, though in very ancient times they were the active volcanoes. Before the Christian era, the form of Vesuvius was entirely different from its appearance now. Strabo wrote in the time of Augustus that it was covered with beautiful meadows with the exception of the summit. That was quite sterile with rocks of ashen hue and sooty consistency, as if they had been consumed by fire. Strabo concluded from this that "the mountain had once burned, and possessed fiery abysses, and had become extinguished when the material was spent." Its height then was less than now, and its outline a wide blunt truncated cone, lowest on the southern side, where the Vesuvius cone now rises. There was a very broad crater on the summit, but no tradition even existed that an eruption had ever occurred. The floor and sides of the crater were overgrown by trees and

shrubbery, with ivy and wild vines running up the walls. This crater was made historical, when the Capuan gladiators sheltered themselves within its natural fortress, from which they came out about 74 B. C. under the lead of Spartacus, to begin the Roman Servile War, he ruling Campania for two years. In the later first century came premonitory earthquakes, beginning in the year 63, when Nero reigned, and occasionally repeated until 79, when the first great and unexpected eruption destroyed Herculaneum, Pompeii and Stabiæ. This was then described, as at first a huge dark cloud, rising from the crater to three or four times the height of the mountain, followed by an eruption of red-hot scoria and ashes, lasting all night, accompanied by successive earthquake shocks. In the morning, when the air cleared, it was seen that the southwestern half of the ancient crater wall had been thrown down, leaving the curving ridge on the other side, now called Somma. The cities were buried under ashes, lava and mud, and the ground, as far as Cape Miseno, was white with fallen ashes, looking as if covered with deep snow.

The younger Pliny described this eruption in letters to Tacitus, and recorded the universal terror, as most people believed the end of the world had come. Outbreaks have occurred since, during which the present cone has been built up, within the ancient crater, and more than once partially de-

stroyed. There was a serious eruption in 203 A. D., and another in 472, when the ashes were blown as far as Constantinople. Nine eruptions had been recorded down to 1500 and the volcano was quiet until 1631, Etna laboring in the meanwhile, and Monte Nuovo being thrown up in 1538. The Vesuvius crater had again become entirely covered with woods and undergrowth, when on December 16, 1631, there came a terrible eruption, the earth being convulsed by earthquakes, large stones thrown fifteen miles, and the ashes blown all over southern Italy. The villages on the seaside of the mountain base were overwhelmed, and three thousand persons perished. There were six serious eruptions in the eighteenth century, that of 1794 killing four hundred people. Seven eruptions in the nineteenth century, occurred previously to that of April, 1872, which lasted seven days, lava bursting out on every side, and one stream issuing with such suddenness, in the Atrio del Cavallo valley, on April 26, that it overtook a crowd of spectators watching the spectacle, and twenty perished. The next serious eruption was in 1895, and then the mountain was quiet until 1903, when it became restless, and was more or less disturbed until the last great outburst began on April 4, 1906. Early that morning, a fissure opened on the southeastern side of the cone, at about 3,600 feet altitude, and a stream of lava flowed down, while large stones were thrown out.

In the afternoon, that side of the cone fell in, and a dense column of smoke rose above the crater, black ashes falling in Naples in the evening. Next day a second fissure opened at a lower level, and another lava stream flowed more than two miles down the mountain. On April 6, came copious lava outpourings, and in the evening, the main crater began hurling out huge blocks, at white heat, with loud detonations, vivid light flashes, and a rain of ashes, which destroyed Ottajano and San Giuseppe at the eastern base, the earthquake shocks being frequent. The ashes, by the 8th, had changed in color from black to reddish gray, the fall being copious, and covering Naples with a dense pall, the cloud which arose from the mountain, shaped like a huge pine tree, being blown a hundred miles northward by the wind, with ashes falling throughout Switzerland, and being noticed even in Paris.

The eruptions continued a couple of days afterward, and then the volcano quieted. The smoke cloud rising from the volcano was measured by observers out at sea, its height being estimated at two miles above the mountain, while the sharp pointed summit of the cone had disappeared, the top being flatter, and the crater much wider and more open-mouthed. It was found, by subsequent examination, that the whole top of the cone had been blown off, so that it was about 375 feet lower than before the eruption. All the villages, at the base of the

mountain on the seaside, were abandoned, being covered with scoria and ashes, though the lava currents, which in some places were twenty-five feet thick, had become viscid and ceased to move before reaching any of these settlements. There were about two hundred lives lost, twenty thousand people were made refugees, causing vast distress, and the damage by the eruption was calculated at $5,000,000. The amount of ashes and scoria thrown out was calculated at one hundred millions of cubic yards.

A railroad carries the visitor from Naples to the mountain, and up its sides, going almost to the summit of the cone. The upper portion of this road was much disturbed by the 1906 eruption, but it was again put in working order. The route passes over some of the great lava streams of former eruptions. The lava color is a deep purple or brownish-black, the surface being somewhat glassy, but roughened, with small projections. It has been congealed into strange forms, sometimes like twisted cables, then wrinkled, with curving lines of viscous flow, wave spreading over wave in one part, and in another having an apparently petrified spray leaping up. Huge blocks are toppled over and held fast, and deep fissures are rent in the mass. Upon the lower plain and slopes, where there is a luxurious vegetation and many vineyards, the native product, the famous *Lacrimæ Christi* wine —"the tears of Christ,"— is offered for sale. As the road mounts

upward, a beautiful view is disclosed, and soon the route comes to the little hermitage and observatory at 2,220 feet elevation, where there also is a hotel. These are perched on a spur of the mountain, making a narrow crest on the western side, between two shallow gorges, down which the lava currents flow, as they emerge from the Atrio del Cavallo, between the curving, craggy wall of Somma and the central cone. This has been a safe position, from which, for over fifty years, scientific observations have been made of the eruptions. Beyond the observatory, the railway is laid over the lava fields to the base of the cone, and thence a funicular railway ascends part way to the crater. The cone, which has to be climbed on foot, is a huge cinder heap, a steep hill of loose slag and ashes, having here and there a little lava stream that has hardened, which gives a better hold to the feet, wearied by sinking into the dusty and unstable ashes. Some visitors are aided by the guides, who help them by pulling up with sticks or straps which they catch hold of, and it is also possible to get carried up in a sort of chair.

Upon reaching the summit, a dense steam cloud appears in front, and a strong odor of sulphur and alkali prevails. This makes respiration difficult, but by moving around the side of the crater to windward, a location can be obtained, where the cloud is blown to the other side. Creeping along and peer-

ing over the edge, the abyss may be looked into, though little can be seen of the interior. The dark and stained walls go steeply down, but are soon lost to view in the steaming and bad-smelling cauldron below. In rifts in the lava the stones are hot, and the pungent vapor quickly fills the eyes with tears, and it will ruin clothing in only a brief exposure. Metals are blackened, and fabrics soon turn rust-color. A very brief view is entirely satisfying, and the visitor, who might at any moment have the cauldron heave upward, with a shower of stones thrown upon him, an outburst which comes frequently, is soon willing to turn about and descend the cone. The coming down is much easier than the going up. Starting on a half-run with the heels set firmly in the cinders, you and a small avalanche of cinders slide down together. Throughout the ascent and the descent, there is an admirable view westward over the rich plains and the city, for the hot steam jet speedily rises high above the mountain, and is carried off by the wind, so that the outlook is unobscured. The landscape is superb, embracing the broad blue bay and its splendid borders, with the far-spreading Mediterranean bounded by the western horizon. The sight of Vesuvius is the great feature of the visit to Naples, grand when in eruption, always interesting, and similar to-day to its exhibition about a century ago, when Byron saw it and wrote thus:

Vesuvius shows his blaze, an usual sight
For gaping tourists, from his hackney'd height.

THE BURIED CITY.

The journey to Pompeii, twelve miles from Naples, is also by railway, and the view of the recently uncovered city, at the southeastern base of Vesuvius, with the exhibits in the Museum at Naples, are the chief source of information we have of the Roman mode of life at the beginning of the Christian era. The relics found at Pompeii have been placed in the Museum, and make an extensive display. There are statues, bronzes, paintings, mosaics, furniture, ornaments, tableware and kitchen utensils, toilet articles and jewelry, and even the children's money boxes and toys, also bread, corn, fruit, vegetables, wines, and practically everything connected with the daily life of the people. These relics were found in the houses and public places, and form a remarkable exhibition. The city itself is about one-half excavated, and the work progresses but slowly. Pompeii had about 25,000 people and was a Roman seashore resort, its walls and Greek Temple showing it to have had great antiquity. In the year 63 A. D., it was seriously damaged by the premonitory earthquake that preceded the great eruption of Vesuvius in 79, which came unexpectedly, when the people were restoring their buildings, many of the structures being found unfinished. The eruption be-

gan August 24, 79, at first with a dense shower of ashes, covering the town to a depth of about three feet, so that most of the population had a chance to escape. Many, however, returned, and then the place was covered with another shower of red-hot fragments of pumice stone, which fell to seven or eight feet thickness, and were succeeded by more ashes and more pumice stone, so that altogether, the city was covered to a depth generally of twenty feet, part of this being formed, however, by later eruptions. The number who perished is estimated at two thousand. The city was an irregular oval of nearly two miles circumference, and the sea then came to its walls, and through the river Sarno, which flowed by it, provided much maritime trade. But the eruption of 79 made great changes, so that the course of the river was deviated, and the sea coast receded over a mile.

The site of Pompeii was completely lost after the fifth century, and during the middle ages its memory passed into oblivion, the Campus Pompeius becoming an undisturbed and uninhabited plain. In the sixteenth century a subterranean conduit was constructed, from the Sarno, directly over the buried Pompeii, to supply Torre Annunziata with water, yet the city was not discovered. In 1748, a peasant, sinking a well, found several statues and ancient bronze utensils, and this led King Charles III of Naples to make excavations, which in 1755 exhumed

the amphitheatre and other buildings. All the rulers of Naples and Italy have continued the work. Murat uncovered the Forum, town walls and the "Street of Tombs," outside the gates, on the road to Herculaneum. During the later nineteenth century a systematic plan has been pursued, the design being to uncover the entire city, which it is thought may be done by the middle of the twentieth century. This work, it is estimated, will cost $1,000,000, and to the fund, the visitors' entrance fees of two lire, about thirty-eight cents each, and amounting to $8,000 annually, are devoted, the Government also contributing.

Entering by the Marine Gate, there being eight gates in the walls, the visitor walks through a veritable city of the dead. The wooden roofs of the buildings are gone, having been burnt or crushed by the weight upon them, but the walls remain, and also the streets, and the frescoes and mosaic pavements inside the buildings. These were preserved by the covering of ashes, and were found in almost as good condition as at the time of the eruption. In the later work, the newly excavated buildings are protected by enclosing and roofing them, so that the beautiful Pompeian colors, largely red and blue, are retained. The shops, on the streets, look just like many of those in old Naples to-day. The highways are bordered by narrow sidewalks, and are not over twenty-four feet in width, while many of them are

only fourteen feet wide. They are paved with large lava blocks, and at intervals, especially at the street corners, are high stepping-stones, so that pedestrians could keep out of the rain water and dirt. The paving blocks are worn into ruts by the Roman chariot wheels, but these ruts being not much over four feet apart, show that the ancient vehicle was not so wide as the modern. Public fountains are at several street corners. There are public offices, inns, law-courts, temples, residences, baths, prisons, villas, two theatres, a forum and large amphitheatre, and the city discloses everything of interest in the daily life of the Pompeians. The architecture is not striking, nor were the materials generally valuable. There is much stucco and other light construction, and the building method seems to have been very like the modern Italian way, the walls and columns being usually of rubble or brick, and coated with plaster. As the upper portions of the buildings are destroyed, only the lower stories remain, but there are staircases, showing that the houses might have been two or three stories high. The absence of glass made a difference in construction, because there are few openings in the outer walls, as the people usually remained in the interior, and thus their houses generally have the oriental system of construction. The entrances from the street, to the houses, are usually by a narrow passage to the large interior court, which had

an opening above to admit light and air, and into this court the interior rooms opened, most of these apartments being very small. The water supply was distributed much as now, leaden pipes conducting it through the streets and into the houses, with bronze inlets and outlets at the baths, and bronze stopcocks at the public fountains.

The highway leading northwestward outside the gate, toward Herculaneum, is the excavated "Street of the Tombs," being lined on both sides with tombs. These vary in design, and as cremation was then in practice, a whole family could be put into a limited space, an ordinary urn being large enough for the last resting place of even the most important Pompeian. The interior of the cremation tomb, has a number of shallow recesses like a dovecote, whence came its name of Columbarium. In these the urns were generally placed, either on a shelf, or let into the wall, with the name of the deceased and his virtues recorded on a tablet. Some of these tombs belong to the earlier period, when the dead were buried instead of being burned, and had painted vessels of terra cotta interred with them. Some skeletons were found in these. The most famous tomb is that of Diomedes, adjoining which is his villa, so vividly described in Bulwer Lytton's *Last Days of Pompeii.* This is a spacious place, with a garden over one hundred feet square, surrounded by a colonnade, and having beneath, a vaulted cellar.

Here were found the bodies of eighteen women and children, who had provided food, and sought protection from the eruption, in the vault. They had their heads wrapped up, and were half buried in the ashes that had penetrated the openings. Near the garden door was found the skeleton of the proprietor Diomedes, with the key in his hand. There are skeletons still occasionally found in the process of excavation, and about one hundred have been recovered. In some cases, the volcanic dust had solidified so as to form an exact model of the original figure. By running plaster into this natural mould, a cast is made, and the person is thus reproduced in most painful accuracy. The casts show that death was not easy, the arms and legs being drawn up, and the fingers often partly clenched, as if in agony. One girl of graceful shape, and about seventeen years old, lies on her face, with her eyes pressed against her arm, as if she had fallen in despair, and wished to shut out the horrid sight. There is also a dog's body, bent almost double, as if dying of convulsions. Some of these casts are preserved in the Pompeian Museum, which is near the Marine Gate.

The forum was over 500 feet long and 100 feet wide, was decorated by statues, and its colonnade of Doric, surrounded by Ionic, had been injured by the earthquake. Adjoining it, or near it, are Temples of Jupiter, Apollo, Mercury, Isis and

Esculapius, with also the Basilica and Macellum, that were markets and law-courts, and the building of the Priestess Eumachia, which was the wool market, and contained her statue. The amphitheatre, at the southeastern edge of Pompeii, was about 450 feet long, and had accommodations for twenty thousand spectators. There is also a theatre with seats for five thousand, and an adjoining smaller theatre with fifteen hundred seats. These structures were open to the sky, but had awnings for protection against the sun and rain, and these were sprayed with water for cooling. Announcements were found, much as now, of contemplated performances, inscriptions showed that pavements, statues and other decorations, were gifts of benefactors and officials, and it was indicated that seats "in the shade" were at a premium then, just as they always have been since. In the adjacent quarter, reserved for the gladiators, several skeletons were found in the cells. The public baths, or Thermæ, were large establishments, admirably arranged and heated, there being separate apartments for the men and women, extensive dressing rooms, and a swimming bath. The private houses are of much interest, the walls being usually painted in bright colors, mostly red, blue and yellow, with also many mosaics. The finest residence is the "House of the Faun," so called because a statuette of a dancing girl was found here. This house is 262 by 125 feet, and in it was the celebrated mosaic of

The Forum at Pompeii.

the "Battle of Alexander," which was taken to the Naples Museum. This work represents the contest at Issus, just as Alexander is charging Darius with his cavalry, and forces the defeat and retreat of the Persians, and somebody has counted 1,374,516 small mosaic cubes in this grand picture. Another elegant residence is the "House of the Tragic Poet," thus named because in it was the representation of a poet reading, and also a mosaic of a theatrical rehearsal where the *choragus* is instructing the actors. On its threshold was the mosaic dog, with the inscription *Cave Canem*,—"beware of the dog." These, with several paintings, were taken to the Naples Museum, this house having provided the greatest variety of beautiful paintings.

The "House of Sallust" is one of the largest, and most complete in its adornment, in Pompeii. Its interior stucco is painted to imitate marble, with bright red and blue colors, and it has in the rear a garden. The "House of Castor and Pollux" was built as two structures, but connected by a large peristyle adorned all around with paintings. This is finely decorated within and without, and has numerous mythological pictures. The "House of Marcus Lucretius" was richly adorned with pictures, mosaics, bronzes, vases, ornaments and coins, most of which have gone to the Museum. The name of the owner was learned from a letter painted on the wall, with his address. The "House of Siricus"

had a large adjacent bakehouse, of which he was proprietor, and here loaves of bread were found. The "House with the Balcony" has three rooms projecting on the upper floor, that were preserved by carefully replacing the charred woodwork with new beams. In the "House of the Vettii," which was gaudily ornamented, and had many paintings, all have been left as they were found, and they make a fine display. The "House of Pansa," the magistrate, occupied an entire block, 319 by 124 feet, and embraced sixteen shops and dwellings, facing two of the streets. Here was found, on the threshold, the famous mosaic with the greeting *Salve*. The "House of the Anchor" was named for an anchor in mosaic at the entrance. The "House of Adonis" had a life size fresco, in the garden, of the wounded Adonis, attended by Venus and Cupids. The "House of the Surgeon," constructed of massive limestone blocks, is regarded as the oldest house in the city, and was named from a number of surgical instruments found in it. The Temple of Isis, according to an inscription over the entrance, had just been restored, after the earthquake of 63, by a boy six years old who paid for the work. It has a court, surrounded by columns, with several altars, and an aperture for the deposit of remains of sacrifices, and chambers for the priests. A secret stairway descended to a cistern. A statuette of Isis, found in the portico, was taken to the Naples Museum.

When this temple was excavated, there were remains of sacrifices on the altars, and several bodies were found, including the skeleton of a priest with an axe. There are many other structures, and as the work of excavation slowly proceeds, new buildings are uncovered and interesting discoveries made. There have also been found, and placed in the Museum, a beautiful painting of Aphrodite, and numerous representations of Narcissus, who was a favorite of the Pompeians. In 1875, there was discovered a painting of Laocoön, regarded as one of the most important specimens of ancient art yet brought to light.

As one wanders through the narrow streets and curious old houses of this resurrected city, the view off to the northwest always discloses the huge volcano which wrought its ruin, more than eighteen hundred years ago, the smoke cloud blowing far away before the wind. It gives the impression, that is almost ineffaceable, of the resistless powers of nature, and the vast changes that come in the world. Yet these tombs and excavated houses are ever contributing their relics, to the wonderful art collections of Italy, probably the greatest in the world, the contemplation of which, with the country's grand development of natural fertility and beauty, so impressed Lord Byron, that in *Childe Harold* he pronounced his noble invocation:

Fair Italy!
Thou art the garden of the world, the home
Of all Art yields and Nature can decree;
Even in thy desert, what is like to thee?
Thy very weeds are beautiful, thy waste
More rich than other clime's fertility;
Thy wreck a glory, and thy ruin graced
With an immaculate charm which cannot be defaced.

TRINACRIA

VIII

TRINACRIA

Lipari Islands—Stromboli—Lipari—Vulcano—Salina—Panaria—The Faro—Scylla—Charybdis—The Land of Earthquakes—Messina—Reggio—Taormina—Naxos—Aci Reale—The Cyclops—Acis and Galatea—The Faraglioni—Catania—Mount Etna—Moio—Bronte—Milazzo—Tyndaris—The Fata Morgana—Cefalu—Himera—Termini Imerese—The Conca d'Oro—Monte Pellegrino—Palermo—Santa Rosalia—Monreale—Castellammare—Calatafimi—Segesta—Monte San Giuliano—Eryx—Trapani—Ægadian Islands—Marsala—Mazara—Salinus—Sciacca—Porta Empedocle—Girgenti—Sulphur mines—Castrogiovanni—Lake Pergusa—Agira—Diodorus—Licata—Terranova—Gela—Vittoria—Sceglatti—Comiso—Modica—The Cava d'Ispica—Palazzolo Acreide—Cape Passero—Syracuse—Dionysius—Hiero—Archimedes—Fountain of Arethusa—Fountain of Cyane—Papyrus.

STROMBOLI.

Sicily is the largest island in the Mediterranean. Its English name is Sicily, while the Italians call it Sicalia, and it was anciently known as Trinacria from its triangular form. Bordering the northern coast is the group of Lipari Islands, their outpost being famous Stromboli. As the visitor approaches, on the steamer coming from Naples, there rises into view, as the first Sicilian landmark, the isolated cone-like summit of Stromboli, a perpetual cloud of black

smoke carried away from its top by the wind, and extending for a long distance in the air. It stands out, about forty miles westward from the mainland of Italy, on an almost circular island, the northernmost of the Lipari group, which is an archipelago of volcanic rocks, rising in bare and rugged glory, steeply from the sea, their lava formed peaks being a sort of uniting chain between Mounts Epomeo and Vesuvius, to the northward, and Etna down in Sicily, and thus scattered promiscuously off the Sicilian and the Calabrian shores. Stromboli, for much more than two thousand years, has been discharging lava. It is the great beacon of the Tyrrhenian Sea, and in the olden time was regarded as the seat of Æolus, the god of the winds, for Pliny said the weather could be foretold for three days by the smoke of this volcano. It was customary in the middle ages to describe great warriors and tyrants, who disappeared from earth, as being banished into Stromboli's crater, for this was regarded as the entrance to Purgatory. The returning Crusaders from the Holy Land, sailing by, said that they distinctly heard the lamentations of the tortured souls, imploring the intercessions of the monks for deliverance. The peak is elevated 3,020 feet, the crater being just northward of the summit. It is in perpetual activity, though not exactly in continuous eruption. Flashing out at brief intervals with regularity and brightness, it throws up showers of stones, almost all falling back within the crater.

The brink can be safely approached, and the interior surveyed, when the smoke is not too dense. Stromboli, in its regularity of eruption, appears much like the intermittent gleam of a flashing lighthouse, and as it stands just where such a lighthouse is needed, guiding into the Strait of Messina to the southward, it entirely fulfils that duty, the flash being visible for a great distance. The volcanic light, however, is different, being larger and less brilliant, and radiating equally in all directions. On a dark night the observer sees not only the flash of light, but also a pale phantom cone, starting up from the sea suddenly in phosphorescent outline, and then as quickly vanishing. There is no actual flame, but the display is much like a flame. Climbing up to the edge of the crater, to examine the inner workings, down within is seen a lake of glowing melted rock, the surface being a skin of semi-solidified lava. Water has become mixed into the seething mass far below, and in the form of latent steam, exerts a great expansive pressure. It forces its way upward, beneath the skin of semi-solid lava on the lake within the crater. This it lifts in a large bubble, which soon breaks with a vast upward rush of steam. The outburst makes the eruptive flash, its luminosity being due to the reflection of the light from the fiery lake below, upon the steam that is condensed into cloud above the volcano. But the visitor, who is peeping over the edge, must be careful when he sees the bubble rising to

near the bursting point, and must duck low to avoid the rush of scalding steam, and afterward nimbly dodge the falling lava stones.

There are seventeen islands in the Lipari group, ten being smaller rocks, and all of them mountainous. They are of volcanic origin, scattered off the northern shore of Sicily, and being from twelve to forty miles distant. The ancient Greek mythology had various legends of these islands, where Æolus ruled the winds, and their history is replete with records of storms and earthquakes. Ulysses came here in his wanderings, and the Greeks were early settlers. The Romans were shy of them, on account of the volcanic disturbances, and about 200 B. C., Vulcanello island was upheaved, while frequent eruptions occurred afterward, and they also suffered severely in the great earthquake of 1783, and somewhat in that of 1908. The Romans used them as a place of exile. The largest island, Lipari, covers about ten square miles surface, and its central summit ridge is elevated 1,950 feet. It has nearly thirteen thousand population, and supplies Europe with pumice stone, of which the surface is almost wholly composed. It was the ancient Meligunis, and its chief town of Lipari is on a rocky plateau on the eastern coast, where a harbor exists, and behind the town, the surface rises in an amphitheatre, toward the central summit of Monte St. Angelo, an extinct volcano. Here is the old castle built by

Charles V, about the middle of the sixteenth century, as a defence, after the place had been plundered by the Barbarossa pirates. There are remains of Roman baths, and of a temple they erected to Diana, and in the modern town, a cathedral, and the storehouses of the merchants who deal in the pumice stone, sulphur, currants and Malmsey wine, the island's products. Southward from Lipari is Vulcano island, connected by a narrow isthmus with the upheaved smaller island of Vulcanello. Vulcano's crater is constantly smoking, its greatest diameter being about sixteen hundred feet, and the precipitous interior walls are covered with incrustations of sulphur. A boiling hot sulphur spring issues from the lower rocks near the shore. This volcano, in the olden time, was believed to be Vulcan's workshop. Salina island, formerly known as Didyme, or "the twins," is composed of the cones of two extinct volcanoes, Monte Vergine rising 2,820 feet, and Monte Salvatore, 3,155 feet. It produces Malmsey wine. A small island group lies northeast of Lipari, of which the largest is Panaria; this group, formerly one island, burst into the present fragments as the result of an eruption, 126 B. C. The volcanic summit on Panaria is elevated 1,380 feet.

SCYLLA AND CHARYBDIS.

We approach the entrance to the Strait of Messina, the Italian mainland of Calabria stretching far away

on the eastern horizon, while in front, to the southward, is Sicily. The southern extremity of Italy is formed very much like a foot, with Calabria as the toe and instep, off which is Sicily, separated by the comparatively narrow strait. The approach to the entrance is heralded by the splendid cone of Etna, with its smoke column, seen rising to the southeastward, while the beautiful Sicilian shores, spreading far away westward, have a noble background of mountain ranges, with summits exceeding 6,000 feet elevation, and snow-covered during nearly half the year. The grand array of spacious bays and picturesque headlands, making this northern Sicilian coast, stretches from Cape Faro westward to the limestone mass forming the Monte San Giuliano, rising 2,485 feet, which was the ancient Eryx. On the eastern side, the Messina strait, gradually broadening, as it extends southward in front of Etna, separates Sicily from Calabria.

At the entrance, the Strait of Messina is barely two miles wide. The Calabrian shore rises, in the background, as the wild ridge of Aspromonte, culminating in Montalto, 6,420 feet high. The impressive slopes, well seen from the opposite Sicilian coast, are overgrown with pines and beeches, this extremity of the toe of Italy having almost barren rocky summits, snow-capped during much of the year, and contrasting finely with the semi-tropical luxuriance of the lower foreground. The northern entrance to the

Messina Strait is almost entirely concealed. On the huge toe of Italy, there is projected a rocky "corn," which is the celebrated Scylla, while to the northward, the opposite coast of Sicily extends in the promontory and Cape of Faro overlapping the Scylla rock and hiding the entrance. It is an old tradition that Hannibal, when escaping from the Romans, sailed southward for Africa, his galley having a native pilot named Pelorus, who said he knew a channel that made a shorter course than sailing around Sicily. Steering toward it, Hannibal saw no opening; the pilot renewed his assertion, and sailed closer in shore; still there was no channel and apparently only a landlocked bay. Believing himself betrayed, and about to be put ashore and delivered to his enemies, Hannibal struck down the pilot with his sword. Then, just a moment too late, the Cape of Faro was rounded, and the entrance to the strait revealed. This cape was called the Promontorium Pelorum, after the unfortunate pilot. There is the ruin of an ancient tower, which looks over at Scylla on the opposite toe of Italy, and this is traditionally described as the site of a monument, which the remorseful Hannibal erected to his memory. In the *Ænead,* Helenus, the prophet, tells Æneas of Scylla and Charybdis:

> They say these places leapt apart of old,
> Rent by the force of huge catastrophe —
> Such power to change doth times long old possess —

When, end to end, each land was only one,
The sea with forceful might athwart it came,
And severed with its waves the Hesperian side
From Sicily, and washed with narrow tide,
'Twixt fields and towns apart on either shore.
Upon the right hand Scylla sits on guard;
Insatiate Charybdis on the left;
Who daily thrice in her deep whirlpool pit
Sucks the vast billows to a sheer abyss,
And rears them high aloft by turns again,
And smites the constellations with the spray.

Scylla is a bold headland, two hundred feet high, the rocks at the base being deeply scooped out by the action of the waves, and it is crowned by the ruined castle dominating the modern town, noted for its product of silks and wines, and has the mournful memory of the earthquakes of February, 1783 and of December, 1908, each of which almost destroyed it. The whirlpool and currents, at the strait entrance, were always dreaded by the ancient navigators, but they have given little fear in modern times. The Scylla rock and the Charybdis whirlpool were famous, though the actual location of the latter is not known, but is believed to have been the Garafolo current, seven miles to the southward, off the Messina harbor "sickle," there thrust out into the strait. In the Grecian mythology, Charybdis and Scylla were two voracious monsters, dwelling opposite each other. Charybdis occupied a rock on the Sicilian shore, and thrice every day gulped down the waters of the surrounding sea, and thrice cast them up

again. Scylla, whose den was on the Calabrian shore, was represented as a beautiful virgin above, but a terrible monster below, having a wolf's body and a dolphin's tail. It had twelve feet and six long necks and mouths, each of which took a victim from every ship passing within reach. Homer in the *Odyssey* tells of these monsters, and the fears of the ancient mariners. But the modern sailor traverses this great highway of commerce undaunted.

From the mountain chains adjoining its northern coast, the surface of Sicily is generally an elevated tableland, cut into by broad and shallow valleys, sloping down to the Mare Africanus off the southern shore, which stretches in almost a straight line from northwest to southeast, and has neither promontories nor good natural harbors. The geologists say the island, in early times, was here connected by a flat tableland, with the present African coast of Tunis, having been afterward separated as the result of some convulsion, the interposed sea being shallow, and having various islands rising from it. Tunis is but ninety-five miles away, and the dim outline of the Atlas mountains can be traced over there in clear weather. The prehistoric races inhabiting Sicily, seem to have become solidified into a people known as the Sicani, who were superseded, at least ten centuries before the Christian era, on the eastern shores of the island, by the Sikeli, coming from the mainland of Europe, the others retiring westward.

Then the Elymi, supposed to be descended from the Trojans, and the Phœnicians, arrived and founded colonies, the Elymi having their sanctuary of Aphrodite upon Eryx. The Greeks came upon the coast of the Messina Strait 735 B. C., founding Naxos, closely followed by settlements at Syracuse, Zancle (near Messina), Catania, and elsewhere on the strait. Later, Greek settlements were made all around the island, and in the fifth century B. C., the Carthaginians appeared in the west, producing many contests, which ultimately, in the third century B. C., brought in the Romans, who got full possession 210 B. C., and made it a province. St. Paul landed at Syracuse when on his journey to Rome, and Christianity prevailed generally in the third century A. D. The barbarians came, and then the Moors, the latter in the ninth century, and holding sway until the Normans appeared in the eleventh century, under Robert and Roger de Hauteville, the former being surnamed Le Guiscard or "the shrewd." Their line became the sovereigns of Sicily, and in the thirteenth century, the island went to the House of Aragon, united ultimately with Spain and Naples, followed by the kingdom of the Two Sicilies, and in 1860 becoming part of the Kingdom of Italy.

THE LAND OF EARTHQUAKES.

We have come into a region of dense population and frequent earthquakes. The Messina Strait has

most beautiful shores, yet it is directly upon the line of contact of the primary and secondary geological formations, between Vesuvius and Etna. But, despite the earthquakes, the people have remained, cultivating the fertile soils, with their fruits and vines, in all the primitive ways of their remote ancestry. The men and women, alike, dig the fields with peculiar long-handled spades, the laboring force standing in a line so as to make a furrow and ridge of the turned-over soil, the same as is done by a plough in most other lands. These people have always lived in dread of seismic upheavals, which have repeatedly ravaged both sides of the strait. In September, 1692, some four hundred towns and villages of Sicily were engulfed, and a hundred thousand lives lost. In 1783, another earthquake ravaged both sides of the strait, and almost entirely destroyed Messina, and every other city and village on its shores. There were no less than seven earthquakes during the nineteenth century, and most of them with frightful results. On September 8, 1905, Calabria was again shaken, premonitory warnings having been given by Vesuvius and Stromboli as early as August 30, when both burst out in unusual eruption, the subsequent earthquake destroying many villages and thousands of lives, and resulting in the formation of a new volcano near Montalto. Again an earthquake came to the neighborhood of Reggio, across the strait from Messina, on October 23, 1907,

and destroyed a thousand lives. But the crowning cataclysm of all was the earthquake of December 28, 1908, destroying Messina, Reggio and a score of other towns on both sides of the strait, and killing nearly two hundred thousand people, the greatest earthquake the world has ever known.

About seven miles southward from Cape Faro on the Sicilian shore, is Messina, and Reggio is opposite, a little farther south. A peculiar elbow-like and low-lying tongue of rock juts out in front of Messina, enclosing a rounded bay, and looking almost as if it had been built by human hands, as a breakwater for a spacious harbor. The Sikeli settled here, and it was natural that the roving Greeks, many being pirates, who early sailed the strait, should have selected it for a colony. The rocky tongue enclosing the harbor, which is one of the best in the world, was known as the Zancle, or "sickle," from its peculiar shape. On this "sickle," also known as "St. Raniero's Arm," grew the town, and it was covered before the earthquake with warehouses, offices and other buildings, having on the extreme end the old-time terminal citadel and lighthouse. The settlement spread over the inner shores of the harbor, which are splendidly encircled by a grand amphitheatre of rugged peaks. There were a hundred thousand people in this busy port of Messina, and its trade extended to all parts of the world. But its history is full of calamities, arising from

war, pestilence, volcanic eruptions and earthquakes, so that the relics of antiquity were few, though the environment is most charming. On the approach, the white walls of the houses looked bright and dazzling in the sunshine; while southwestward, in the distance, rises the giant volcano, Etna, the highest in Europe, with the attendant cloud of smoke, gathering above the crater at the summit of the noble cone, and carried away lightly by the wind.

The dawn of history in Messina was in the eighth century B. C., when the Greek and Chalcidian pirates came along, and found the Sikelian settlement of the Zancle, which they occupied. It had all sorts of masters afterward, and attracted many Messanians from the Peloponnesus, so that ultimately they preponderated, and it thus got the name of Messana. The Carthaginians then appeared upon the scene, captured and destroyed the town, and after two centuries of war and comparative ruin, the Romans came by invitation of the Mamartines, or "Sons of Mars," who had held it until Hannibal captured the castle, and this call for help began the first Punic War. The Roman possession was secured in the third century B. C., and they held it until the fall of the Empire. The Saracens got control in 842, and the Crusaders in their journeyings to the East, passing through the Messina Strait, so valued the harbor that it led to the Norman occupation, with great resulting prosperity. For five

centuries afterward Messina was a practically independent city with high privileges. In the sixteenth century Charles V presented many gifts, in memory of which a street was named after his son, Don John of Austria, on his return from the victory of Lepanto over the Turks, John's statue erected in 1572 being among the civic adornments. Then there were quarrels between the aristocrats and the citizens, which resulted in the downfall of the privileges of the citizens after a long strife, an attack by the French in the late seventeenth century, and conflicts that reduced the population from 120,000 to about one-tenth the number. The citadel was erected at that time to control the town, but the prosperity of the place disappeared. It had subsequent calamities from the plague of 1740, killing 40,000 people, the earthquake of 1783, which almost entirely destroyed it, the bombardment of four days in September, 1848, the visitation of cholera in 1854, with sixteen thousand victims, another destructive earthquake in 1894, with a less violent shock in 1905, and the final disaster of 1908.

The Messina Cathedral, called La Matrice, was a Norman construction, begun in the eleventh century and completed under King Roger II. Fires had burnt and earthquakes damaged it, so that little remained of the original building. It was a Latin cross three hundred feet long and one hundred and forty-five feet wide across the transepts, the façade

being early Gothic. In the interior, twenty-six granite columns supported the roof, and are said to have been brought from a temple of Neptune, once standing on the Faro, at the entrance to the Messina Strait. This cathedral is the shrine of Madonna della Lettera, referring to a celebrated epistle said to have been sent to the people by the Virgin Mary, and brought by St. Paul in the year 42. The faithful believe that this epistle is kept in a receptacle in the High Altar, and in its honor there is held a great festival June 3d. This altar, built in 1628, was richly decorated, and then cost about $950,000. A Papal investigation, however, has shown that this epistle, with other alleged sacred documents, were forgeries of the fifteenth century. There are sarcophagi of the Emperor Conrad IV and of Alfonso the Generous, who died in 1458. The cathedral had various mosaics, and the pedestal supporting the vessel containing holy water at an entrance to the nave, was an ancient Greek work, with an inscription showing that it bore a votive offering to Esculapius and Hygeia, then the patrons of the town. A splendid fountain of the sixteenth century stood on the piazza fronting the cathedral. Messina had many other churches. The oldest Norman church, the Annunziata dei Catalani, was near the cathedral, a temple of Neptune having been originally upon the site, and afterward a mosque. In the modern church of Santa Naddalena, during the revo-

lution of 1848, a bloody battle was fought between the populace and the invading Swiss troops, when the town was bombarded by King Ferdinand (Bomba) of Naples. In the Church of St. Agostino was a painting of the Madonna, its legend being that angels brought it hither, across land and sea, from Scutari, at Constantinople. Behind the city the enclosing mountain amphitheatre rises into Monte Antennamare, elevated 3,705 feet, and giving a grand view over the ruined city, harbor, and the gleaming strait, to the mountainous Calabrian shore beyond. Over there is Reggio, also partly ruined, and almost as ancient as Messina, whose colonists originally settled it in the eighth century B. C. It was the Roman Rhegium, was rebuilt after the destructive earthquake of 1783, and when the disaster of 1908 came, it had about 18,000 inhabitants, and was a most attractive place, its broad and handsome streets extending from the sea to the beautiful hills in the rear, which displayed many fine villas.

THE WORLD'S GREATEST TRAGEDY.

The greatest earthquake on record, coming without premonition, Monday morning, December 28, 1908, began at 5:20 o'clock, long before daylight, and when most of the population were asleep. It was a sudden, and at first upward, then horizontal, violent shock, continuing less than a half minute, throwing down the buildings, the ground splitting

open in many places, with fissures into which many houses fell. A few minutes later came other shocks, fourteen being counted in about forty minutes, and the resultant vibrations continued at intervals during about four hours. The sensation experienced by survivors was, that the ground surface appeared to be thrust upward by the first great shock, while at about the same time the bottom of the Messina strait seemed to rise. The latter produced an initial rush of waters, quickly followed by a great tidal wave or outrush, that swept the shores of the strait, and the monster wave rising thirty-five to forty feet, and with resistless force, dashing over all the lower portions of the banks, bounding up the streets, and overflowing the land to a distance of one to two thousand feet, according to the elevations. This wave receded, and then came on again, the ebb and flow of these tidal avalanches, being counted four times during the next half hour, after which the oscillations continued, though with decreasing force. Other earthquake shocks and vibrations occurred at intervals for several weeks, over sixty shocks coming in ten days, and about three hundred during January, some being quite severe and causing further destruction to the ruined buildings.

The damage, however, was done in less than a minute, the sudden thrust along the land surface, together with the breaking up of the falling buildings, creating enormous clouds of dense and choking

dust, which long hung over the ruined cities, and obscured the entire region. The chief destruction was in the strait and along its shores at Messina, Reggio and the adjacent towns and villages. The serious ruin spread for forty miles, from Castroreale in Sicily southwest of Messina, northeast to Palmi on the coast of Calabria, and back for several miles from the coasts. Damage was done from Riposto under the shadow of Mount Etna in Sicily, northeast up to Pizzo in Calabria, a distance of eighty-six miles, while for fifty miles off in every direction, the earthquake shocks were strongly felt. The survivors say there were most violent lateral motions and thrusts, which split open the buildings and threw down the walls, and when trying to escape, the repeated vibrations shook them off their feet. Deafening noises accompanied the destruction. Messina was destroyed for over two miles along the shore, and a mile back, up the adjacent slopes. The sea wall fronting the city was broken up, and with the promenade, has largely fallen, apparently being sucked into the strait and sunken under water. Debris from the ruined buildings buried the people and filled the streets, fires almost immediately beginning, some continuing nearly a week. Similarly, Reggio was thrown down, the first great shock opening a chasm eighty feet wide near the railway station, whence gushed forth steam and boiling water, some jets thrown as high as an ordinary house, and scald-

ing a number of frightened people. The tidal waves added to the destruction, along the sea fronts and on the lower slopes. Over five hundred vessels were destroyed or damaged. Torrents of rain followed, continuing intermittently during four days. Flocks of crows and ravens soon came to the stricken district, attracted by instinct to the scene of terrible destruction.

An officer upon a vessel in the harbor, described the tidal wave as a fearful upheaval of the waters, which seemed to rise like a mountain and rush toward the shore, where there had been noises, at first like the growling of distant thunder, followed by loud reverberations, caused by the apparent rending of rocks and falling of buildings, and as if enormous quantities of loose stones were sliding down hill. The lights everywhere had gone out, and the darkness became oppressive. The agitated sea seemed to grow livid and then white with foam, carrying everything with a wild rush toward shore, the ship's decks keeling over. By the time the crest of the wave had passed, occasional fires appeared on shore, and then everything became obscured in a vast eddying cloud of dust that settled down, enveloping the ship like a fog-bank, and hiding both sea and shore. Afterward, when daylight came and the dust had gone, the harbor walls were seen to be demolished, the city destroyed, and the surface of the strait was covered by an enormous mass of wreckage, casks,

boxes, broken boats and timbers, eddying about as the agitated waters washed them. The upheaval of the bottom of the strait was shown by soundings, taken between Messina and Reggio shortly afterward. Where the chart had a depth of 273 fathoms, only about fifty fathoms were found, thus indicating an upheaval of over 1,300 feet, instantly produced by the resistless forces beneath.

The suddenness and completeness of the destruction gave the stricken people no chance of escape, as the buildings fell upon and buried them, and hence the enormous loss of life. The repeated tidal waves drowned many seeking to escape at the shore. A correspondent at Messina, who had been at the siege of Port Arthur, said that its bombardment was not as ruinous as the Messina earthquake, and that six months' cannonade by all the artillery in the world could not produce the results of the few seconds of nature's wrath. Over fifty towns and villages were destroyed in Sicily and Calabria. The work of rescue and succor speedily began, though it was ineffective in many cases, owing to the difficulty of getting victims released from the piles of stones and rubbish covering and imprisoning them. Warships from various nations went to Messina Strait to help, money and supplies being poured into Italy from both sides of the Atlantic. The Italian King Emmanuel and Queen Helena hastened to the ruined district, passing several days in giving encourage-

ment, succoring the injured, and directing helpful efforts. Rescue work at night was illumined by the searchlights of the warships, and the wounded and destitute were taken away to many towns throughout Sicily and Italy. Cold and hunger killed many survivors, and large numbers became insane. One of the most impressive scenes was the progress of the Archbishop, through the streets of destroyed Messina, blessing and consecrating the ruins of buildings, under which so many people were buried, as cemeteries, and also the improvised trenches, into which the corpses of hundreds of unknown dead had been placed and covered with quicklime. But one Messina church escaped the almost complete ruin, and this greatest of disasters was a shock throughout the world. The universal hope was expressed, however, for a recovery.

Sicilia scourged of Fate, thy Damocles
Lost courage 'neath a hair suspended blade,
Though thine a tyrant death may not appease,
A deathless Past intones: "Rise, undismayed!"

Diligent work has been proceeding for restoring the stricken city, but the recovery is slow. As the wreckage is removed, in cleaning the streets and building sites, vast treasures have been recovered, and where possible restored to the heirs of the owners. But the Government found some $20,000,000 in money, jewelry, securities and other valuables for which no owner could be discovered.

MESSINA TO CATANIA.

From Messina southward to Catania is fifty-nine miles along the strait. The railway route crosses many *fiumane* or torrents, usually wide dry beds in summer, and passes through villages ruined by the great earthquake. Farther along, the cliffs that make the shore of the strait are generally of lava, and form the foothills of Mount Etna, this grand snow-covered mountain, its base nearly a hundred miles in circumference, being constantly in view. The railway goes over viaducts and through tunnels, displaying beautiful scenery. Twenty-two miles from Messina, it is tunnelled under the projecting Cape of Sant' Alessio, an admirable promontory, its hills of yellow limestone and cliffs of variegated marbles, standing out boldly in full view. On the top is a deserted fort, and nearby, a little cluster of white houses amid the green, making the village of Forza. Beyond, there projects into the sea, the massive Taormina hill, having behind it the site of Naxos, where the Greeks first settled upon this coast, of which, however, few traces remain. This hill, rising about four hundred feet, guarded the ancient Tauromanian passes, the boundary between the domains of Messana and Naxos.

The railway bores through another tunnel, under the cape that terminates the projecting Taormina promontory, and then turns westward around the

base of the hill, whereon was built the ancient Tauremenium. It is now a village perched on cliffs high above the shore, and consists mostly of one long street, rich in churches, but with a population that is very poor. High above, on a peninsula at 1,300 feet elevation, is the ruined castle dominating the place, that was the old time acropolis, founded by permission of Dionysius of Syracuse, after he had destroyed Naxos, 403 B. C. Toward the northwest, the ridge rises in the summit of Mola, about 2,100 feet, and beyond in Monte Venere, 2,834 feet. These elevations, dotted with modern villas, afford remarkably attractive views, especially of the splendid snow-covered cone of Etna, occupying the southern horizon, and of the many lava streams, radiating from its crater, and spreading far and wide. Upon one of these summits are the ruins of the old-time theatre, the most interesting relic of Taormina, located on the slope of the hill east of the town, and commanding a magnificent prospect. The strong position of the place enabled the town to long resist the attacks of the Saracens, but they captured it with a general massacre in 902, the bloodthirsty Ibrahim-ibn Ahmed, who led them, strangling and burning the adherents of Bishop Procopius, upon his corpse, the savage Ibrahim even proposing to devour the bishop's heart. The remains of the Moorish castle are on another lava hill, and also the hermitage of Santa Maria della Rocca, which was built

after the Normans got possession in the eleventh century.

The theatre, elevated about 420 feet above the sea, was constructed originally by the Greeks, but the present work is largely Roman, although it since suffered from Saracenic mutilations, and the carrying off of building materials and ornaments to use elsewhere. It is a semicircle hewn in the rock, 357 feet in diameter, with a well-preserved stage, and provided for thirty thousand people. Southward from Taormina, one can look upon the site of Naxos down by the coast, founded by Theocles, 735 B. C. It is now chiefly a thriving plantation of lemon trees, along the edge of which flows the little river Alcantara. The special god of its early Greek colonists was Apollo Archagetes, and his altar stood near the river, on the road to Taormina, where the ambassadors of the settlement were accustomed to offer sacrifices, when leaving for the festal assemblies of their fatherland, ancient Greece. Naxos was ruined more than twenty-three centuries ago, and then Taormina rose. Naxos was traversed by one of the Etna lava streams, where now stands, as if a sentinel of the long departed place, the Castello di Schisó. From the ruins of the Taormina theatre, the visitor, at sunset, gets a magnificent view of the atmospheric color effects, as he watches the crimson glow lingering on snow-covered Etna, with the beautifully tinted smokes hanging in a grand halo over

the mountain. All around are gorgeous hills and mountains, stretching off to the eastern rippling sea, which purples in the twilight that gradually darkens toward the horizon.

To the southward, the route crosses many more lava streams, rising black, brown and reddish in rugged form, and making chains of rocky hills that in some places swell into grand crags at six to seven hundred feet from the seashore. These are all the products of volcanic eruptions, of which some have been comparatively recent. The older lava formations are covered with rich soil produced from the disintegrated volcanic dust, which is very fertile, and here flourishes the vine in luxuriance, the lava supplying the potash on which the grape thrives. One of these streams, descending 396 B. C., just when the Carthaginian general Himilco had destroyed Messana, prevented his going southward to Syracuse, and he had to make a long diverging march around the western base of Etna. The actual base of the mountain is reached at Giarre, and on its slopes near by is the gigantic chestnut tree, the Cento Cavalli. A few miles farther southward, and built on several lava streams, is Aci Reale, nestling under the flanks of the mountain, noted for its medicinal springs, and for its destruction by the earthquake of 1693. It has been completely restored, however, and has about twenty-five thousand population.

This is a region of great mythological fame, for here was the scene of the love of Acis for Galatea, and the interference of the jealous giant Polyphemus. We are told in the Grecian mythology, that the Cyclops were giants, having but one circular eye in the middle of the forehead. Homer describes them, in the *Odyssey,* as a race of cannibal shepherds, dwelling on the shores of Sicily, whose chief was Polyphemus. Some of these Cyclops were the assistants of Vulcan, forging armor and ornaments for the gods and heroes, their workshops being the volcanoes of Etna and Lipari. They were the sons of Neptune, and Polyphemus, the hugest and most desperate of them, dwelt in a cave on the shore near Etna. The Neriads were the nymphs of the Mediterranean, fifty beautiful girls, the daughters of Nereus and Doris, and especially propitious to sailors. Their father was a benevolent, wise and gentle old man, the most unerring weather-prophet of old, and he lived at the bottom of the sea. Among the famous Neriads was the charming Galatea, who was beloved by Acis, the son of Faunus, but Polyphemus, wild from jealousy, crushed Acis to death under a huge rock. The mourning Galatea changed his blood into the river Acis, and on its banks is the town of Aci Reale. Ulysses, in his long wanderings, came to the island of the Cyclops, Sicily, and with twelve of his followers, entered the cave of Polyphemus, who devoured six of them. Ulysses then plied the

giant with wine, making him drunk, put out his single eye with a burning pole, and tying himself and his surviving companions under the bodies of the sheep, escaped when the flock was let out of the cave. Polyphemus, in his blindness, hurled rocks after them, but they escaped over the sea, and then the giant implored his father Neptune to wreak vengeance on Ulysses, so that the remainder of his voyage was full of adventure and disturbance.

Down along the shore, and on the sea, are the Cyclopean rocks, enormous isolated lumps of lava. There are seven of these in the sea, known as the Faraglioni, the rocks which the blinded Polyphemus hurled after the crafty Ulysses. Isole d' Aci, the largest, is the most picturesque, covering about four acres, and rising into a conical summit, elevated nearly three hundred feet. It is built of columnar basalt and limestone. On one of the most prominent Cyclopean rocks, on the mainland, is the Castello d' Aci, the picturesque ruined castle upon its pinnacle having been the scene of various sieges. This rock of Aci Castello, is said by tradition to be the identical one with which Polyphemus crushed Acis. The name of Aci is given to a dozen villages all about, which claim to stand in the identical grove where Acis and Galatea told their mutual loves, and raised the violent jealousy of the one-eyed giant, who, according to the later matter-of-fact investigations of these myths, was really Mount Etna, and his

single eye, the volcanic crater. The cool waters of the "harbifer Acis" of Ovid, the brook into which the swain's blood was converted, pour out from under a lava bed near by, and now known as the Acqua Grande, flow about a mile down to the sea. The lava streams on which Aci Reale is built, represent seven different eruptions, and flowing one over the other make a black, cinder-like precipice, more than fifty feet high, into which a staircase is cut leading to the town. For nine miles from Aci Reale to Catania, the route crosses the rugged ridges of various lava streams, that have come down from Etna to the coast, some of them terminating in bays between the cliffs, which they have partially filled up, and displaying most strikingly their strange, broken, craggy, formation. Upon the surface they look much like a black glacier, or a tempestuous ocean, suddenly stilled and solidified. Everywhere are dreary dark broken billows of spongy tufa, with lighter streaks and patches, suddenly changing, on the eastern side, to the deep blue sea, and inland merging gradually into the splendid fertility of the highly cultivated flanks of Etna. Here are displayed all the climates of Europe in one view, with their characteristic vegetations on the varying elevations of the mountain slopes.

Catania, nestling under the shadow of Etna, is located about midway on the eastern Sicilian coast, and has nearly 120,000 people, being next to Pa-

lermo the most populous city of Sicily. It enjoys a good trade, but is not very attractive to visitors, its antiquities being rather uninteresting, although it is among the most ancient of the early Greek settlements, the Chalcidians having founded Catania about five years after Naxos. Its great charm is the view of the magnificent proportions of Etna, rising to the northward of the city. The ancient theatre, constructed by the Greeks and enlarged by the Romans, has been almost entirely overwhelmed by lava streams, and while there are considerable excavations, the present exploration is done chiefly by torchlight underground. Its diameter is about three hundred and twenty feet. It was here that Alcibiades, by his impassioned oratory, 415 B. C., induced the Catanians to enter the league with Athens against Syracuse. The city became the Athenian headquarters in that great war, but Syracuse ultimately conquered, and Dionysius reduced the people to slavery. Carthage afterward held Catania, then Rome, the Goths and Saracens successively, and finally the Normans, it subsequently following the fortunes of Sicily. The guardian volcano has frequently treated it badly. In 1169, the city was almost entirely destroyed by an earthquake accompanying an eruption. March 8, 1669, another eruption came, upheaving Monti Rossi, northwest of the city, an outpost of Etna, and destroying Nicolosi, on its slope, about ten miles

from Catania. A loud explosion was heard, and a chasm about six feet wide and of unknown depth, suddenly opened on the mountain side, and extended up to within a mile of the summit, being fully twelve miles long. This was followed by the opening of five other fissures, all emitting a great light and pouring out sulphurous steam and smoke, with a noise that was heard for forty miles. The side of Etna was thus bodily split by the resistless internal pressure, and the liquid contents burst out, first filling up the long and narrow fissures, and then pouring down the slope in a stream twenty-five feet wide, which flowed directly toward Catania, and overwhelmed fourteen villages on the way. The inhabitants, brave even in despair, built a wall sixty feet high, to check its progress, but this the lava banked up against and overflowed, pouring in a viscous fiery cascade over the top. Then they went out in procession, headed by the bishop, and extended their most precious relic, the veil of their patron St. Agatha, toward the fiery foe; when the stream was miraculously diverted, going around the western side of a Benedictine monastery. After a journey of fourteen miles, the red-hot lava reached the harbor southwest of the city, and flowed into the water, hissing, boiling and steaming, for three miles further. Over the seething waves, the masses of lava were rolled, and the blackened river, solidified, now stands a grim promontory nearly two

thousand feet wide and forty feet deep, projecting three miles from the ancient quay walls, which still remain imbedded in the lava. Another earthquake and eruption in 1693 entirely overwhelmed the city, and the present Catania has been erected upon the ruins. The great earthquake of December, 1908, which destroyed Messina and Reggio, spared Catania, the townsfolk being convinced that this deliverance came through the intercession of St. Agatha. Some of them declare that after the earthquake, her apparition appeared on the summit of Mount Etna, looking like "an angelic dream." For many days afterward, groups of the people closely watched the glittering snowclad summit for her reappearance.

St. Agatha, the patron saint of Catania, has her shrine in the Duomo or Cathedral. She was a Christian maiden, cruelly murdered in the third century, by the Roman prætor Quintianus. Her relics are in a chapel, and Richard Cœur de Lion presented her gorgeous crown. The silver sarcophagus containing her remains, is borne through the city on her festival day, in February, by men wearing white robes, the Catanian Senate accompanying, while all the women then cover their faces, so that only one eye is visible. In the cathedral is also the monument of Bellini, the composer, born here in 1802, who died at the early age of 33, a townsman of whom the Catanians are very proud. The

cathedral was begun by King Roger, in the eleventh century, but was destroyed by the earthquake of 1169, so that little remains of the original structure. Most of the materials were taken from the ancient theatre, the granite columns of the façade still standing. Earthquakes have made sad havoc in the cathedral at various times, and among its frescoes is a representation of the terrible eruption of Etna in March, 1669. On the piazza in front, is a fountain, having an Egyptian obelisk of granite, borne by an antique elephant carved in lava, the latter a Roman work. Northwest of the cathedral is the extensive Benedictine Monastery of San Nicola, now a barracks and school, with a museum and observatory. The latter is surmounted by a huge dome, which makes a fine vista view, along the new street opened westward to the railroad station near the sea, which the Catanians have named the Via Lincoln. This street crosses the lava stream of 1669. At right angles is constructed, from the cathedral northward, the Via Stesicoro Etnea, directly toward the mountain, of which it also gives a grand vista view. The street broadens at the Piazza Stesicoro, northward of the Via Lincoln, and here is the elaborate monument to Bellini, erected in 1882, adorned with the sitting statue of the famous composer, and having on the pedestal figures emblematic of his famous operas, Norma, Puritani, Pirata and Sonnambula.

MOUNT ETNA.

The loftiest volcano in Europe, and the highest mountain of Italy south of the Alps, is not known by the people who live near it under the name given by the rest of the world. They call it *Il Monte* and *Mongibello,* the latter being the Sicilian title, compounded from the word *monte* and the Arabic term for mountain, *jebel.* The name Etna means "to burn," and is derived from a Greek word. It is elevated 10,742 feet, snow-covered, and is seen most nobly in the view from every direction, the smoke cloud rising in the calm atmosphere, or curling off as it may be blown by the wind, being visible in clear weather a hundred miles away. Etna has been a volcano from prehistoric times. The ancients called it the forge of Vulcan, and they said the restless giant Enceladus, imprisoned beneath, made the eruptions and earthquakes. A violent outbreak, before the arrival of the Greeks, caused the Sicanians to abandon the district. Pindar, who called it the "Mother of the Snows," and the "Pillar of Heaven," described an eruption 476 B. C. To the Moors it was *Jebel Hathamet,* the "Mount of Fire." There have been about eighty eruptions during historic times, of which that of 1669, above referred to, upheaved Monti Rossi to the southward and destroyed twenty thousand lives, while the eruption and earthquake of 1693 destroyed

forty villages and towns and a hundred thousand people. There were five violent eruptions, and other weaker ones, in the nineteenth century. In May, 1886 an eruption came which had been for three years threatening, a new crater being formed on the southern slope, since called Monte Gemmelaro, near Nicolosi. The lava streams poured in the direction of that town, the terror-stricken inhabitants bearing the pictures of the saints, from the churches, in a supplicating procession, while the Bishop of Catania also brought out and solemnly displayed the veil of St. Agatha. The lava stream reached the Altazelli, a building dedicated to the village patron saints, situated about a mile above it on an eminence, and the stream, three days later, was divided at the hill, going on either side and slackening its flow. Another stream came along shortly afterward, and after the people had left the village, it halted its flow when within about twelve hundred feet of the outlying houses, the eruption ending with an earthquake. A later eruption, in July, 1892, opened a new crater in Monte Gemmelaro, and the lava flowed southward, at a velocity of five hundred feet an hour, toward the apparently doomed Nicolosi. But the interposition of the saints was again invoked, and the cooling lava slackened its speed to thirty feet an hour, and ultimately halted before reaching the village. In May, 1908, and in March, 1910, there were earth-

quakes and eruptions, new craters opening on the mountain sides, ejecting clouds of steam, and ashes and stones, that fell upon Aci Reale and Nicolosi, with lava streams, but these outbreaks ceased without inflicting serious damage.

The fertility of the soil on the lower slopes of Etna, has made this dangerous region the home of a dense population. The orange, chiefly the blood orange, grows on the mountain flanks, up to an elevation of about one thousand feet, there being only a scant water supply at greater heights. Nearly every tree of the luxuriant plantations, however, has had the lava hewn out to get a foothold. The olive flourishes to an elevation of three thousand feet. The vine, is the chief cultivation, especially on the southern and eastern slopes, facing toward the sun. There are three distinct zones of vegetation. The lower, or *Regione Coltivata,* on which these vines and trees, along with others, appear, is thoroughly cultivated, the vine occasionally growing at a height of thirty-six hundred feet. The second zone, the *Regione Boscosa,* extends above to about 6,800 feet, having some oaks and beeches, with pines in the lower and birches on the upper parts. Chestnuts grow at all heights up to 6,000 feet, and are cultivated both for their nuts and timber. Still higher is the third zone, the *Regione Deserta,* reaching to the top, and having only a stunted mountain vegetation. The forests

on the slopes are less in extent than formerly, and the frequent eruptions have destroyed much of the woodland. The population very sparse above 2,500 feet elevation, is extremely dense on the lower slopes, exceeding three thousand people to the square mile, being attracted by the extraordinary fertility, despite the dangers. The giant chestnuts of Etna grow in this rich lava soil, and are of world wide renown. The most celebrated is the Castagna di Cento Cavalli, heretofore referred to, the "Chestnut of the one hundred horses," and stands at about 4,000 feet elevation, near Riposto. It is a cluster of four trees, and a fifth one existed until 1852, when it was cut off and sold for timber. Originally they were united as one tree, though this tradition is involved in mystery, and it must have been very long ago. If there was only one trunk, it measured 200 feet in circumference, and was the largest tree existing. The name was given because, when Sicily was governed by the House of Aragon, a queen, with a retinue of a hundred horsemen, took refuge under the spreading branches. There are other monster chestnuts on the mountain sides, some over a thousand years old, the largest single tree being the Castagno della Galva, having about seventy-six feet girth.

The summit of Etna is a spacious region, about nine miles in circumference, from which rises the volcanic cone and crater about a thousand feet

higher. This crater, composed of piles of lava and ashes, constantly changes form, and is differently shaped after every eruption, being from two to three miles in circumference. Nicolosi, about nine miles northwest of Catania, is the usual starting point for the ascent, which is a popular excursion. Among those who went up in April, 1904, was the Emperor William of Germany, who insisted on walking, instead of riding a mule, and he spoke in the highest praise of the magnificent view. The route leads over the lava fields, and through groves of chestnuts, oaks and beeches, until the Observatory is reached in the *Regione Deserta,* at the foot of the crater. There are various smaller craters of extinct volcanoes passed on the way, and hollows filled with snow and ice, usually covered with ashes which preserve them, so that the ice is taken down the mountain for use in the towns below. From the Observatory, the side of the crater is mounted by a difficult walk over the steeply inclined surface, through deep ashes, care being taken to get to windward so as to avoid the sulphur fumes. The object is to reach the top before sunrise to enjoy the view. The sun rises behind the mountains of Calabria, which cast their long shadows across the Messina Strait, and only the top of Etna being bathed in light as the beaming disk emerges, this light, as the sun advances, gradually descending to the lower mountain slopes, while the dark violet

shadow, which Etna casts to the westward over Sicily, deepens. To the southward, Catania slumbers in the dawn, while to the westward spreads for many miles, the varied and beautiful landscape of Sicily, becoming brighter as the sun's rays enlighten it. Far to the northward, are the little cones of the Lipari group, rising from the sea, with tall Stromboli smoking in the distance. From our feet, the lava streams of many eruptions, wind in long black streaks down the mountain sides to the valleys below, and there make desolate rifts amid the almost universal green. The distant Faro at the Messina Strait entrance is distinctly seen, and two or three conspicuous peaks appear among the lower mountains of western Sicily. Turning away from this splendid view, having a horizon eight hundred miles in circumference, one can look down into the yawning crater. The sulphurous steam rises from the boiling bubbling abyss, and escaping above, is driven by the wind away from us. The mass within hisses, shrieks and thunders, the ash piles vibrate with shocks, and tongues of flame shoot from the seething cauldron, until the brief view satiates, and then the observer briskly descends the cone, over the ashes, to the mules waiting below. There is, on the southwestern slope, the black and desolate chasm of the Valle del Bove, three miles wide, with walls sometimes a half mile high, and having within it two cones

and craters, that were in eruption in 1852. On its upper margin is the ancient watch-tower, the Torre del Filosofo, a Roman construction said to have been the observatory of Empedocles, when, disgusted with the vanities of the world, he prepared for a sensational disappearance, by jumping into the crater of Etna. The river Alcantara flows around the northern base of the mountain, and here is the village of Moio, threatened by the lava from an eruption in 1879, which had advanced almost to the river bank, but passed, when the affrighted inhabitants brought out the statue of their patron Saint Anthony, escorted by an elaborate religious procession. Farther up the river is Randazzo, the village nearest the crater, which luckily always escaped injury. Bronte, a town to the southward, gave to Lord Nelson the Italian title of Duke of Bronte. The name comes from a Greek word signifying "thunder."

MESSINA TO PALERMO.

Westward from Messina, the Neptunian mountains stretch over the peninsula terminating in the Faro, while over on the northwestern side is ancient Mylæ, near the port of Milazzo, its medieval castle being now a prison. The northern coast of Sicily is a succession of promontories between which run down the *fiumare,* or water courses, through deep ravines. Among these promontories

is Cape Tindaro, a rock rising over nine hundred feet almost perpendicularly from the sea, and through it the railway pierces a tunnel. Here was the Greek colony of Tyndaris, founded in the early fourth century B. C., which became a thriving port in the Roman days, and of which some traces remain. This sickle-shaped peninsula was known to the Greeks as the "Golden Chersonesus," and the Romans called it the "Island of the Sun." On the summit of the cape is the Monastery of the *Madonna del Tindaro,* giving a beautiful view over the sea, with the Sicilian coasts stretching away on either hand, the Lipari islands out in front, and off southeastward the noble snow-crowned cone of Etna. Tyndaris has ruins of a Grecian theatre and Roman Gymnasium, while the Monastery is upon the site of an ancient temple, probably sacred to Castor and Pollux, who were the city's special patrons. Within the cape cliffs is the stalactite grotto of Fata Donavillo, of which the tradition is that it is the haunt of the fairy Fata Morgana, who kidnaps brides on their wedding night. The phantom palaces of this noted fairy, are said to be often seen in mirage, when approaching the Sicilian coast.

To the westward, the rocky mass of Cape Orlando stretches into the Mediterranean, and in the waters beyond, was the scene of a great naval contest in the thirteenth century, when the fleets of Catalonia and Anjou under Roger Loria vanquished Fred-

erick II. For fifty miles westward, the railway runs close to the edge of the sea, crossing many *fiumare,* in a region of great beauty, and reaches a limestone promontory, towering high above the town of Cefalu, which spreads along the shore and has a fair harbor in front. This was ancient Cephaloedium, the original Greek settlement, for which Carthage, Syracuse and Rome warred before the Christian era, and which the Arabs captured in 838, after a long siege. Upon the towering rock are the remains of a castle and a Roman fort, with huge cisterns cut in the limestone, the outlook being magnificent. It was for this stronghold that the rival races contended during many centuries, the Normans under Roger finally getting possession. It is related that in 1129 King Roger, returning from Naples along the coast, bound to Palermo, was in danger of shipwreck, and in a fervent prayer for safety, he vowed that if permitted to land, he would erect on the spot where the vessel might touch the shore, a church to Christ and the Apostles. The wreck occurred on the strand at the base of the Cefalu rock, and he soon began the cathedral. It is one of the famous Norman structures of Sicily, and around it grew the modern town. The cathedral is nearly two hundred and fifty feet long and one hundred feet high, the façade resting upon huge stone blocks, and having two imposing towers, connected by a colonnade, which

formerly was covered with mosaics representing gifts by Roger and his successors in their generous treatment of the church. The nave is double the width of the aisles, and the vaulting above is supported by noble columns mostly of granite. Admirable mosaics, among the finest in Sicily, adorn the interior.

Farther westward, the railway leads through a richly cultivated district, where the manna tree grows, furnishing large amounts of manna for export, and the surface rises to the summit of the Gibilmanna, nearly 3,600 feet, the "manna mountain." In the interior, stretching off to the southward, are the Madonian mountains, displaying the summits of the Pizzo Antenna, 6,470 feet, and behind it, Monte San Salvatore, 6,255 feet. Out of the range, flows northwestward to the sea, one of the largest torrents of Sicily, the Fiume Grande, which was a frontier between Carthage, Syracuse and Rome, when the former dominated western Sicily. The ancient name of the stream was the Himera Septentrionalis, and beyond it was Himera, the westernmost settlement of the ancient Greeks on this coast, founded 648 B. C., where shortly afterward was born Ticias, famous for the development of the Greek chorus, for which his name was changed to Stesichorus. There are here the ruins of an ancient Doric temple, on which stand numerous houses of the modern village. It was

at Himera that the Greeks surprised the Carthaginian Hamilcar when besieging the town, 480 B. C., annihilating his army, in consequence of which, to appease the wrath of the gods, Hamilcar sought death in the sacrificial fire. Hannibal, his grandson in vengeance, captured the place 409 B. C., and destroyed it. About seven miles westward, in those days, was the Carthaginian outpost town of Termini, now the prosperous port of Termini Imerese, famous for its macaroni, and having over thirty thousand people. Its baths were the original attraction, and the Phœnicians were the first settlers, but Hannibal, after the destruction of Himera, made it his Carthaginian outpost, constructed on a promontory, in a very strong position. The ancient castle was often besieged in the middle ages, and was not dismantled until 1860. There are many Greek and Roman remains, and its springs, which were praised by Pindar, are led to a bath establishment, founded by Ferdinand I, the water of 110° temperature containing Epsom salts.

The coast gradually trends to the northwest, encircling the Gulf of Palermo, and terminating beyond the city, in the noble heights of Monte Pellegrino and Cape Gallo, the most northern portion of western Sicily. Under shadow of the mountain nestles the spacious city of Palermo, the domes, towers and spires of this noted capital of

Sicily, rising in picturesque view on the approach, backed by the amphitheatre of hills enclosing the famous fertile plain, which on account of its form and beauty, is called the Conca d'Oro, or the "golden shell." This is the most luxuriant region of the island, being covered with groves of fruit trees, thoroughly irrigated by water systems, begun by the Romans and perfected by the Saracens, even the subterranean waters being brought to the surface to increase the supply. This irrigation has increased the yield of the land twenty-fold, the owners of the springs and wells enjoying a large income from the revenue produced by their outflow. It is one of the most densely populated districts of Sicily.

PALERMO.

A shallow and restricted harbor, thrust far into the land, on the western shore of the Gulf of Palermo, originally attracted the Phœnician mariners to make a settlement, which when the Greeks came, they called Panormus, referring to the good anchorage, the name meaning "all harbor." Part of this harbor still remains, in the little water enclosure of La Cala, but the larger portion, then spreading inland, has been covered by the streets and buildings of the city. The two streams emptying into it are now streets, being covered over, and here was ancient Panormus, which was a

Carthaginian stronghold, captured by the Romans 254 B. C. Hamilcar Barca afterward came, and placed his camp on Monte Pellegrino to the northward, vainly attempting to recapture the place, in a siege continuing three years. The Goths got it, and the Saracens in 830, making it their capital, and holding it over two centuries, during which it attained great prosperity, and exceeded at one time three hundred thousand inhabitants. The Normans arrived under Robert and Roger Guiscard in 1072, and it afterward was ruled by the House of Anjou, expelled in 1282 by the revolution known as the "Sicilian Vespers." Then it became Spanish territory, and ultimately was the capital of the kingdom of the Two Sicilies, the final revolt against King Ferdinand of Naples (Bomba) culminating in the entry of Garibaldi with his *I Mille* the "thousand volunteers," on May 27, 1860, and its becoming part of the new Italian kingdom. Palermo, as the name ultimately became, has suffered from war, bombardment, pestilence, and almost every ill that can befall a town, but it has survived all, and is now the finest city of Sicily, having about two hundred and eighty thousand population, and enjoying prosperous trade under the watchful care of its patron, Santa Rosalia, its popular title being "la felice" because of the splendid climate and grand situation. The saint, who was a niece of the Norman king, William the Good, lived in the

twelfth century, and in the bloom of youth became a recluse, her home being a grotto on Monte Pellegrino. Here she died in 1170, and her bones enclosed in a chest of solid silver, weighing nearly a ton, were in the cave in 1624, when the plague was raging in Palermo, and were taken to the city in solemn procession. We are told that at once the dread disease was banished, she being made from that time the patron saint, with the cathedral as her shrine, and her festival celebrated during five days in July, while armies of pious pilgrims visit the cave in the mountain every Whitmonday.

The sea front of Palermo, adjoining the harbor, is the splendid promenade of the Marina, a quay stretching for a mile from the Porta Felice, adjoining the Cala, southward to the spacious Flora or public garden, one of the most elaborate parks of the island, and the great popular resort, where the townsfolk assemble to enjoy the shade, the perfumes of the foliage, and the outlook, which reaches to Mount Etna. It displays the finest sculpture in Palermo, a group of the noted Greek naval heroes, the Canaris brothers. Northwestward from this park, the Via Lincoln leads to the railway station. Inland from the northern end of the Marina, is the beautiful pleasure ground of the Giardino Garibaldi, occupying the old Piazza Marina, on the land reclaimed from the ancient harbor. Back southwestward from this Piazza,

runs the chief street of the city, the Corso Vittorio Emanuele, extending inland to the Palazzo Reale, the chief citadel. Midway, it is crossed at right angles by the Via Macqueda, these streets dividing Palermo into four quarters and their intersection being the octagonal Piazza of the Quattro Centi, which is the centre of the city. The various façades of this Piazza are highly decorated churches and other buildings, and it is embellished with columns and statues of the Seasons. The Corso was known as the Cassaro, from the name originally borne, derived from the Arabic *el Kasr* "the castle." This castle was of Saracenic build, but the Normans Robert and Roger made additions, and subsequent sovereigns improved it, so that now this is the Palazzo Reale, rising on a moderate eminence, in the spacious Piazza della Vittorio, at the termination of the Corso. Its great attraction is the Cappella Palatina, dedicated to St. Peter, and built by Roger II in Arabic-Norman style. This is regarded as one of the most beautiful palace-chapels existing, a gem of medieval art, and especially rich in mosaics. Passing through the vestibule, adorned with Egyptian granite columns, the interior is entered, a nave with aisles about one hundred feet long and forty feet wide. Above the transept crossing, rises a dome seventy-five feet high. Splendid columns support the Moorish pointed arches between the nave and aisles. The

The Cathedral, Palermo.

in which they are kept in the famous silver chest, exhibited to the faithful on her fête days.

Palermo is noted for its many churches. San Giovanni, near the Palazzo Reale, was one of the earliest Norman churches, and originally a mosque. San Salvatore, built in the seventeenth century, is an oval with three large recesses. La Martorana was built by King Roger's admiral Antiochenos, and in it met the Sicilian parliament, after the expulsion of the House of Anjou. Given to the nuns of the Martorana convent in the fifteenth century, their name was attached to the church, which is a square Byzantine building with apses. There was originally a dome, demolished by an earthquake, and removed in 1726. The vestibule contains mosaics representing Antiochenos at the feet of the Virgin, and Roger being crowned by Christ. Santa Maria della Catena is down by the old harbor La Cala, its name referring to the chain, originally used to close the harbor entrance, and fastened near the church. In Santa Maria della Vittoria, also near the harbor, is displayed in a chapel, the door through which Robert Guiscard, the Norman, first entered the city. Santa Maria della Spasimo, nearby, is the church for which Raphael painted his *Christ bearing the Cross,* now in Madrid. The Magione was the church of the Teutonic order, presented them by Henry VI, and in the aisles are stone slabs covering tombs of the

knights. In Santa Maria della Volta, in 1647, the revolutionary leader, Giuseppe d' Alesi, who had attacked the Spanish Viceroy's Government, was assassinated. The spacious San Domenico, built in the seventeenth century, will accommodate twelve thousand people, and contains the tombs of many eminent Sicilians. There are noted paintings and mosaics in the churches of Palermo, and their architectural splendors and rich decorations are impressive.

One of the most famous paintings in Palermo is the *Triumph of Death.* It is a fresco of the fifteenth century, in an arcade of the Palazzo Selafani, now used as a barrack, upon the eastern side of the Piazza della Vittoria. The artist is unknown, but the tradition is that it was painted by a Fleming, confined here by sickness. Death in triumph is riding over pope, king and people: on the one hand, his arrows have stricken a fashionable lady, and a young man in the midst of a merry party, while on the other side, the poor and wretched in vain implore him for release from their living misery: among the latter group is the artist. The city has various evidences of devotion to the memory of the Italian liberator, Garibaldi. The northern extension of the Via Macqueda, the Via della Liberta, has, at its termination, the entrance to the attractive English Garden, an elaborate equestrian statue of Garibaldi, representing him

addressing his friend Bixio, after the successful battle of Calatafimi, and announcing the march to Palermo. He had landed, with his thousand volunteers (*I Mille*), at Marsala, on the western coast, May 11, 1860, and after the victory, entered Palermo, May 27, soon becoming master of all Sicily, which at the election, in the subsequent October, voted to unite with the new kingdom of Italy. He came into the city by the gate on the southern verge, since called the Porta Garibaldi, the street approaching it being now named the Corso dei Mille, while the street within the gate is the Via Garibaldi, leading to the Piazza della Rivobuzione, in the heart of Palermo, this having been the route of his march. The National Museum of Palermo contains an excellent collection of antiquities, paintings and sculptures, with many Phœnician, Carthaginian, Greek, Roman, Etruscan and Arabic works. Among these are the famous Metopes, from ancient Salinus, showing the development of Grecian sculpture, long before the Christian era. The pictures include the noted triptych, the *Gabinetta Malvagna,* a small altarpiece, preserved under glass, attributed to Mabuse, in the fifteenth century. The attractions of this beautiful capital are many. A delighted visitor tells us that nature has made Palermo a city of luxury, where the summer heat is tempered by gentle breezes from the sea, and snow can find no

resting place in winter; where roses are in full bloom all the year; where fruit trees are in blossom, and green peas are gathered in January and February; where the sago and date palms flourish, the bamboo and sugar cane grow at all seasons in the open air; and where the vine is a weed and its precious juice a drug.

WESTERN SICILY.

The grand mountain environment of the Conca d'Oro, gives a magnificent view over the fertile plain, the city and the sea, and here, at an elevation of about a thousand feet, and five miles westward from Palermo, is Monreale, the deserted castle, on the high hill behind it, being elevated 2,500 feet. Upon this "royal mountain," William II, known as "the Good," and the grandson of Roger II, founded, in the twelfth century, a Benedictine abbey, and around its splendid church has gathered on the hill slopes, a town of nearly twenty thousand people. This cathedral is built as a cross, about three hundred and thirty feet long and one hundred and thirty feet wide, its entrance flanked by massive square towers, the interior supported by granite columns, and the walls entirely covered by mosaics. These depict scriptural scenes in three classes — prophecies of the Messiah, the life of Christ, and the lives of the Apostles, and they cover about seventy thousand square feet of surface. King

William the Good is the hero in the elaborate display, one mosaic, above his royal throne, representing the king receiving the crown from the Saviour direct, and not from the pope, while another, above the archbishop's chair, represents the king in the act of offering a view of the cathedral to the Virgin. The tombs of William I, known as "the Bad," and William II, are in one of the transepts. Little remains of the Abbey buildings, but the cloisters are extensive and beautiful, the pointed arches being adorned with mosaics, and supported by over two hundred richly ornamented columns with varied capitals. There are some modern buildings used for school purposes.

Northward from Palermo, beyond the impressive Monte Pellegrino, Cape Gallo extends boldly into the sea. The cliff-bordered coast stretches westward, and deeply indented is the Gulf of Castellammare, with the far projecting Cape Vito beyond it. In this bay is Castellammare, the port of ancient Segesta, to the southward. The battlefield of Calatafimi, where Garibaldi won his first victory in Sicily, May 15, 1860, is not far from the noted ruins. Northward from Calatafimi flows the Fiume Gaggera, the ancient Scamander, passing through a deep and beautiful valley on the eastern flanks of the Monte Varvaro. Here were warm medicinal springs, which seem to have attracted the first settlement of the Greek Egesta, the origin of which is involved in

mystery, but is attributed to descendants of the Trojans who came to this valley. This gave a basis for the tradition prevalent in the Roman days that the place was founded by Æneas. The people were involved in many conflicts during the Carthaginian and Roman wars, and when the latter came into possession, the name became Segesta. It is now a ruin, containing one of the best preserved Doric temples in Sicily, on a hill at 1,000 feet elevation, surrounded by a girdle of much higher mountains. This is a majestic structure, two hundred feet long and eighty-five feet wide, enclosed by thirty-six columns, each about thirty feet high, including their capitals, and six feet thick, with intervals of eight feet between. The structure, when work ceased, was incomplete, and the columns are unfluted, and the basement steps unfinished. On the hill slope of the town is the theatre, hewn in the rock, the auditorium being over two hundred feet in diameter, with a stage of ninety feet width. There is a grand view, from this theatre, of the mountains rising to the northward, at the edge of the sea.

The Fiume Gaggera flows down to the Fiume Sant Bartolommeo, which falls into the Gulf of Castellammare, and to the westward rise the summits of the mountain range in Monte Inice, 3,490 feet, and Monte Sporagio, 3,705 feet, overlooking the sea. The ridge extends northward in the ponderous Cape Vito, while to the westward it terminates in the

isolated Monte San Giuliano, 2,485 feet high, the northwestern extremity of Sicily, from which there is a view over the Mediterranean and the group of Ægadian islands to the westward, with the African Cape Bon beyond at the horizon. This mountain was the renowned Eryx of antiquity, and by the seaside at its base is its ancient port, Trápani. The Phœnicians built, on the summit of Eryx, a temple of Astarte, the goddess who was their Venus, where no blood was permitted to flow on the altar, and the Greek tradition was that this temple had been originally founded by Hercules. It was also said to have been founded by Æneas, and in the *Æneid* is recorded that Anchises died here, his son Æneas instituting games in his memory. The temple ultimately became a shrine of Venus, and this dèity at Eryx, was worshipped by all the maritime people throughout the Mediterranean. The original town was built on the mountain slope below the temple, and in the first Punic War, Hamilcar Barca destroyed it, carrying the inhabitants as slaves down to the shore to people Trápani, then known as Drepana, the name meaning a sickle, and derived from the rounded shape of the projecting peninsula adjoining the harbor. The Romans afterward captured the town and held the temple, being long besieged by Hamilcar Barca, who could not drive them out. The Saracens later got possession, and constructed an Arabic castle on the summit, being

ultimately expelled by King Roger, who is said to have been aided by San Giuliano appearing and putting the Saracens to flight, so that in gratitude the mountain was given his name. There is now a small and decaying town on the summit, with a church, and the ivy-clad castle, on top of the rugged rock, used as a prison. There also are some remains of the old Phœnician walls, large blocks of stone, the foundation of the present wall, while the ancient reservoir of the Temple of Venus is preserved in the castle garden. The port of Trápani has a good trade in alabaster, coral, cameos and other art productions, and a population approximating 40,000. The islands in the offing include ancient Hiera, now Maretemo, its Monte Falcone rising 2,245 feet, and Ægusa, now Favignana, elevated 1,070 feet. Their enclosing waters are a prolific tunny fishery.

About twenty miles down the coast boldly protrudes Cape Boćo, the westernmost point of Sicily, the ancient Lilibeó, the port of Lilybæum having been on a harbor just southward. This is now the busy modern town of Marsala, noted for its Marsala wine, extensively made from the Sicilian vines and spirits. There are Phœnician and other remains of antiquity in the neighborhood. Lilybæum was the chief Carthaginian stronghold in Sicily, and it became the Roman capital of the western peninsula. The Saracens gave it the present name Marsa-ali, the "harbor of Ali." It was here that Garibaldi

landed May 11, 1860, with his thousand volunteers, who soon got possession of all Sicily, ultimately making it part of the United Italian kingdom. The survivors of this band of patriots were all pensioned by the Italian Government, and not so long ago it was found that the pension rolls had been "padded," there being nearly fifty times as many pensioners as there were real survivors (then numbering 238), and most of them being young men who were not born in 1860. Dumas the elder was among Garibaldi's band, and was his envoy who arranged the surrender of various towns.

Beyond Marsala we get into the land originally held by the Selinuntians, and about a dozen miles southeastward, along the coast, come to Mazara, one of their colonies, now a port, surrounded by an Italian quadrangular wall nearly forty feet high, and defended by square towers, which have survived from the middle ages. King Roger built the castle at the southeastern angle, now in ruins, and also the cathedral. From the fronting promenade, the Marina, there is a pleasant outlook over the sea. The coast curves gradually around to the eastward, with much of the interior surface a moor, having on its eastern verge, and not far inland from the sea, the famous ruins of Selinus, containing some of the grandest ancient temples in Europe. The Greeks founded this city in the seventh century B. C., and it was the most western of their settlements in

Sicily. The conflicts the Selinuntians had with the Egestans, were the pretext that brought the Carthaginians into Sicily, under Hannibal Gisgon, in 409 B. C., when he besieged Selinus with a hundred thousand men, put most of the inhabitants to the sword, and carried others into African captivity, only twenty-six hundred escaping. He destroyed ancient Mazara at the same time as Selinus, but the latter place never recovered, and during the first Punic War, in the third century B. C., it was finally destroyed, and since then has remained practically deserted. The Selinuntians were engaged in constructing their temples when Hannibal Gisgon began the siege, and the incomplete buildings still exist. In approaching from Mazara, the ancient quarries are passed at Campobello, whence the stones were got, and the work of quarrying, interrupted by the Carthaginians, has never been resumed. Huge drums of stone for the columns are partly severed from the rock, and others are lying at intervals, along the road to Selinus, where the transport was interrupted. These drums are about eight feet in diameter, and eight to ten feet long, and correspond with those used in one of the incomplete temples, for which they no doubt were intended.

The little Fiume Modione, the ancient river Salinas, flows through a narrow valley to the coast, and on its eastern side, upon a hill about one hundred and fifty feet high, the Greeks erected their Acropolis

overlooking the sea, with the town behind it. The river valley, originally a marsh, was drained in the sixth century, it is said by Empedocles, and here they founded on the hill to the westward, the sacred precinct, with the temples that were being constructed when the Carthaginians captured the city. For over two thousand years the place has been deserted, excepting as hermits during the early Christian era, and sometimes since, may have lived in solitary cells among the abandoned temples, which were partially destroyed by earthquakes. The Saracens called it *Rahl-el-Asnam,* the "town of the idols," but they were driven out by King Roger. The Italian Government is making extensive excavations and restorations, and most of the metopes and sculptures found, have been placed in the Museum at Palermo. There are seven temples, of which two were built in the seventh century B. C., soon after the first settlement, two in the sixth century, and two in the fifth. The largest temple of all was building during the sixth and fifth centuries, and was unfinished when Hannibal came, the columns being unfluted. It was dedicated to Apollo, and is one of the largest Grecian temples known, being 371 feet long, and 177 feet wide, with columns sixty feet high, including their capitals. Three other temples are over two hundred feet long, and two more were about as large. These, so far as can be ascertained, were sacred to Hercules, Hecate and Hera. Much of the walls and founda-

tions of buildings in the old town and the ancient necropolis have been excavated.

To the eastward of Selinus the Fiume Belice, the ancient Hypsas, flows out from the hills, and among the rocks of Menfrici beyond, the Greeks got the marbles for their Selinus metopes. Farther on, an abrupt eminence rises two hundred and sixty feet from the sea, and here the Selinuntians had their warm baths, the place being called Shakkah by the Saracens, which has been modernized into Sciacca. There are warm sulphur and salt springs to the eastward of the town, and the ancients attributed them to Dædalus, while in the middle ages, San Calogero, a monk, was said to have discovered them, so that the isolated cone, out of which they come, is called Monte San Calogero, and rises in elevation 1,280 feet, about two miles from Sciacca. It was the old Sicilian fashion to attribute all such springs, wherever they might be, to Dædalus, while in medieval times the people attributed them to San Calogero, the name coming from a Greek word signifying a monk. Both were myths. Dædalus lived before the Trojan war, in Crete, and was a sculptor in the mythological tradition. He became an enemy of King Minos, and to escape from the island made for himself, and for his son Icarus, wings fastened on with wax. They flew over the Ægean sea, but Icarus going too near the sun, the wax melted, loosening the wings, and he

dropped and perished in what was called after him, the Icarian Sea.

Off this coast, in July, 1831, a volcanic island about five miles in circumference, with a crater, rose from the sea, but on January 18, 1832, it as suddenly subsided and disappeared. There was another eruption in 1866, making a shoal, and a few years later a valuable coral reef was discovered at the place, which has proved a most successful coral fishery. From Sciacca the coast trends southeast, and forty miles distant is Girgenti. About half way between, the little river Platoni, the ancient Helycus, flows into the Mediterranean, this having been the site of the Greek settlement of Heracleia Minoa, which has almost entirely disappeared. Girgenti is among the hills, at an elevation of over 1,000 feet, and about three miles inland from the coast, its busy little harbor down by the sea, whence its sulphur is exported, being now named after the noted philosopher, the Porta Empedocle.

AGRIGENTUM.

A hill, descending abruptly on its northern face, and sloping gently southward toward the coast, is environed on either hand by two small rivers, which unite into one channel outlet. These are the Draga (the ancient Hypsas) to the west, and the San Biagio (the Acragas) to the east. The abrupt hill between,

remarkable for its position of strong defence, was early occupied by the Greeks, as they extended their colonization westward on the Sicilian coast, and here they founded in the sixth century B. C., Acragas, which Pindar described as "the most beautiful city of mortals." They erected temples to Athene and Zeus, the former on the eastern part of the hill, known as the Rock of Athene, and the latter on the north-western portion, where also was the Acropolis. The modern surviving town of Girgenti is in the neighborhood of the Acropolis and Temple of Zeus, and now has over twenty thousand people. The ancient city extended far down the hill slopes, and toward the coast. The Greeks worshipped Athene and Zeus Atabyrius, the Moloch of Mount Tabor, and during the reign of Phalaris, in the later sixth century B. C., that cruel tyrant is said to have sacrificed human victims in red-hot bulls of metal at the altar of Moloch. In the fifth century the domain of Acragas was extended to the northern coast, and Himera was conquered. Theron, then the tyrant, allied his forces with Gelon, the tyrant of Syracuse, they defeated the Carthaginians at Himera, 480 B. C., and then the aggrandizement of Acragas began. The vast army of captives taken in the battle constructed the temples, the canals and a spacious fishpond. Empedocles ruled subsequently, and the city, which had a great trade with Carthage and throughout the Mediterranean, reached the zenith of its career. The

population then exceeded 200,000, and the extensive public works, of which the remains now cover the ancient site, excited the admiration of succeeding ages. Of its grandeur and pomp, Empedocles said, "the Agragentians built their dwellings as though they were to live forever, and indulged in luxury as if they were to die on the morrow." But the renowned city fell. The Carthaginians overran western Sicily, captured and plundered it, 406 B. C., sending the loot, including the most valuable works of art, to Carthage. The temples were burnt, and ultimately, in the Punic Wars, the destroyed city, alternately reviving and declining, passed under Roman domination, and became known as Agrigentum. Thereafter it was less important; the Saracens became the masters in the ninth century, and Roger with his Normans in 1086.

As Agrigentum appears to-day, there are two hills with a depression between. The lower hill to the northwest, covered by the modern town, has on its summit, at 1,080 feet elevation, the cathedral, of which the construction began in the fourteenth century, but nearly all of it is of later date, the campanile being still unfinished. Nearby is the Church of Santa Maria dei Greci, containing remains of the Temple of Athene, regarded as the most ancient construction in the city. From the public gardens adjacent, there are grand views over the sea, far to the westward. The eastern boundary of the town is

a depression, beyond which rises much higher, the famous Rock of Athene, elevated 1,150 feet, and the summit enclosed by a wall. Here stood the Temple of Athene, but everything long ago disappeared. The tradition is that the depression between the hills was excavated by Empedocles, to admit the passage of the *Tramontana,* the north wind; and thus drive out the malaria from the ancient city to the southward. The summit of the Rock gives a splendid outlook in every direction, over land and water. The sulphur mines in the neighborhood yield a large part of the Sicilian product, nearly a half-million tons yearly. There are remains of the extensive canal system which brought water to the city, and also of the fishpond, the site of which is now a hollow in the valley of the Drago.

The ruins of a half-dozen ancient Grecian temples are scattered over the hill slopes, the chief being the temple of Zeus, over three hundred and sixty feet long, and one hundred and eighty feet broad, with columns fifty-five feet high. This vast building was never entirely completed. It has thirty-eight columns, fourteen at the sides, and six at the ends, each twenty feet in circumference. Upon the eastern side were represented the contest of the gods with the giants, and on the western side the conquest of Troy. Portions of the walls have fallen down, and much of the stone has been removed, a good deal of it to construct a mole at the port. The Temple of

Hercules, about two hundred and forty feet long, is surrounded by thirty-eight columns. It contained the statue of Hercules, which Verres attempted to steal at night, but his mercenaries were repulsed by the citizens. Adjoining is the Porta Aurea, the old town gate leading to the harbor, by which the victorious Romans entered Agrigentum, 210 B. C. The tomb of Theron is here, and farther down the hill, near the confluence of the two little rivers, stood Myron's famous statue of Apollo. The Temple of Concord, nearly one hundred and forty feet long, is the best preserved of these structures, because after the Norman occupation it was converted into a church, San Gregario della Rape (the turnip). It has a colonnade of thirty-four columns. The Temple of Juno Lacinia, one hundred and thirty-four feet long, had thirty-four columns, but earthquakes have damaged some, so that only twenty-five are standing, and nine half-columns have been rebuilt. All of them are much eaten by the hot sirocco blowing against their southeastern sides. The Temple of Castor and Pollux is one hundred and eleven feet long, and also had thirty-four columns, but it was almost entirely destroyed. Portions of two temples have been used in a partial restoration, by which four Doric columns were recently rebuilt. Its site overlooks the hollow of the fishpond. There are remains of a small Temple of Ceres, now a church, and there also were temples erected to Vulcan and Esculapius.

SOUTHEASTERN SICILY.

From Girgenti, a railway, by winding route through the mountainous district of central Sicily, goes over to Catania on the Messina Strait, and displays superb scenery. Its initial path is among the *zolfare,* the Girgenti sulphur mines, and it soon penetrates the mountain fastnesses, and is constructed along the bottom of a wild and tortuous ravine, having perched high above, on the summit of the enclosing rocky precipices, the towns of Calescibotta to the north and Castrogiovanni on the south, their people looking down upon the railway trains in the gorge far below. The strongly fortified hill top of Castrogiovanni, elevated 2,600 feet, is the geographical centre of Sicily, and one of its most famous cities. The town is constructed on the flat summit, in the form of a semicircle, open toward the east, and having the noble mass of Etna in full view. Here came the Greeks from Syracuse, in their wanderings across the island in the seventh century B. C., and founded Enna, so called from its form and central position, as the "umbilicus of Sicily." It was the location of the worship of Demeter-Koza (Ceres) by the earlier peoples, and much of the original Sicilian mythology is connected with this imposing hill. The Romans got it after two years' siege, in the second century B. C., and in the ninth century A. D., the Saracens made repeated unsuccessful attacks, finally capturing

the place by treachery in 859. They called it Kasr-Yani, from which the present name is derived. The Normans conquered in 1087, and during the subsequent centuries it was strongly fortified. The ancient citadel, La Rocca, occupies the topmost pinnacle of the hill, its towers giving lovely outlooks in many directions. Here originally stood the Temple of Demeter, but no vestige remains. As the railway proceeds eastward beyond the ravine, there is a splendid retrospect of the two cities, high upon the rocky cliffs, between which the train has passed. A little way to the southward, among the hills, is the Lake Pergusa, with its caverns, the place to which Pluto is said to have carried off Proserpine. Its waters are now availed of by the hard-working people, for steeping their flax. To the northeast of Castrogiovanni, upon a hill even higher, is Agira, one of the most ancient of the Sikelean cities, and far antedating the Grecian occupation. Here was born the historian Diodorus, who describes the place, and tells how Hercules visited it during his wanderings in the Mediterranean regions. He was worshipped as the patron then, but now the tutelary genius of Agira is St. Philip.

The coastal district to the southeast of Girgenti is full of sulphur deposits, and at fifty-three miles distance is another sulphur shipping town, and the chief port of the Southern Sicilian coast, Licata. It was originally established by the Phœnicians, and be-

came a Carthaginian stronghold, their fleet having been vanquished off the port by Regulus, in one of the greatest naval contests in ancient times, 256 B. C. About twenty miles farther southeast, on the coast, is another seaport, Terranova. In and around the town are the remains of Gela, which the Greeks founded 689 B. C. and where Æschylus died 456 B. C. From here went out the colony that originally settled Acragas (Girgenti). Hippocrates was its ruler, when at the apex of its prosperity, in the fifth century, B. C., but in the latter part of that century, the Carthaginians captured and destroyed the place. There are remains of a Grecian temple erected to Apollo, and from here Hamilcar sent the celebrated statue of that god to Tyre, where it was found by Alexander the Great. The final destruction of Gela was in 282 B. C., and the present modern town has risen from its ruins. Some distance farther is Vittoria, on an inland hill, having its port of Scoglitti, and on the coast, down to which flows the little river Camerina, is the ancient Hipparis. To the eastward of this stream are the extensive ruins of the Grecian city of Camarina, settled by Syracuse in 599 B. C., and afterward a colony of Gela. It had a desultory existence until the ninth century A. D., when the Saracens destroyed it. To the northward, and near Vittoria, is Comiso, where was the noted fountain of Diana, a spring whose waters refused to mingle with wine, when drawn by impure women.

Farther southeastward, among the limestone hills, is Modica, a city of nearly fifty thousand people, built in the ravines which are cut down by streams in these elevations. From it extends for several miles toward the coast, the famous ravine of the Cava d'Ispica, one of the most noted antiquarian curiosities of Sicily. The grottoes of this extended gorge are said to have been constructed by the original Sicanians, and were not only tombs, but also habitations. They are built as chambers, and of different stories to which access was had through interior apertures. The entrances from the outside are usually several feet above the ground. Many of them contain graves, others are believed to have been the habitations of rock drillers, and there are inscriptions, showing that some were used for Christian burial in the fourth century. To the northward of Modica, about twenty miles distant among the mountains, at an elevation of nearly 2,300 feet, is the Grecian Acræ, founded by an early colony from Syracuse, a settlement that became the Roman Placeolum, and the Arabic el Akrat, from which names were derived its present title of Palazzolo Acreide. Its acropolis, on the top of a high hill, could be approached only from the eastward. There are here the tombs and relics of all the races that successively held this fortress, from the early Grecian era down to the Saracens. The latter destroyed it, and the modern town has grown at the base of the hill. From here flows

southeastward, the river Cassibile, to the sea, the ancient Cacyparis, on whose banks the General Demosthenes, with his army of defeated Athenians, retreating from Syracuse in 413 B. C., were overcome and had to surrender. A few days later, Nicias, farther southward near Noto, was defeated with the Athenian remnant, on the river Asinarius. The Syracusan conquerors erected in the river bed a monument to mark the victory, and there still stands a fragment of this column *La Pizzuta*, rising about thirty feet, which has survived for twenty-four centuries. The limestone formations finally terminate in the rugged cliffs of the massive promontory, the ancient Pachynum, forming the southeastern extremity of Sicily, now known as the Cape Passero.

SYRACUSE.

We come to the greatest of all the ancient cities of Sicily, where over a half million people lived in the height of its prosperity — Syracuse — which Cicero praised as "the largest of Greek, and the most beautiful of all cities." To-day it is a place of about twenty-five thousand population,— the Italian Siracusa — confined to the island whereon was made the original Greek settlement, its trade being small, and its present fame based almost entirely upon the memories of the distant past. The southeastern shore of Sicily, some distance northward of Cape Passero, projects into the sea, in limestone masses,

where is scoured out a small semicircular bay, into which flows, through a low and marshy surface among the cliffs, the river Anapo, the ancient Anapos. From the mainland northward, which rises to some elevation, there extends a small peninsula, and off its end to the southward, is the rocky island of Ortygia, enclosing and protecting the eastern side of the bay, so that the entrance from the south is narrowed to about three-quarters of a mile in width. This forms an admirable harbor, now known as the Porto Grande, and its shores were early settled by the original Sikelians and the Phœnicians. The ancient city of Syracuse was extended far over the mainland, north and west, which is strewn with relics of the Grecian and Roman days. The limestone structure abounds as usual in water-worn caverns, and also in what are known as *Lattomie,* or open excavations, made by similar action of the water upon the limestone, and enlarged by quarrying. The harbor and its enclosing hills present a scene of great natural beauty, its attractions enhanced by the historical and classical fame of ancient Syracuse.

The story is that when the Greeks first came to Sicily, founding Naxos in the eighth century B. C., almost under the shadow of Mount Etna, another colony led by Archias from Corinth, entered the bay behind Ortygia and found there the Fountain of Arethusa, on the western shore of the island, in a region of great fertility and beauty. This *lattomia* is the

mouth of a tunnel through the limestone, of unknown and mysterious length. The classic legend suggests that it extends beneath the sea, over to Elis in Greece, where the blushing nympth Arethusa was surprised while bathing, by the river god Alpheus, and was pursued hither, when by the interposition of Diana, she was changed to the river, which there disappears, and here pours out a copious flow. An earthquake in the eleventh century made the waters salt. In the olden time, this sacred but convenient pool was the public washtub for the Syracusans, but the spring has recently been enclosed in a spacious basin, surrounded by papyrus plants. The Grecian colony grew in importance, and in the fifth century B. C. passed under control of Gelon, who transferred his capital hither, and after his defeat of the Carthaginians at Himera 480 B. C., Syracuse became the controlling power of Sicily. His brother, Hiero I, then reigned, and at his court Æschylus and Pindar flourished. Thrasybulus succeeded, but subsequently he was expelled, and a Democracy ruled the city, and then came the period of the Athenian attacks. In 414, the Athenian fleet and army under Nicias reduced the city to extremities, almost surrounding it by a double wall cutting off succor. But help came, originally from Sparta. The Athenians were discomfited; disease and dissension added to their troubles. They decided upon retreat, but just when it was to begin, there was an eclipse of the moon, August 27,

413, and the superstition of Nicias delayed the march. This gave the Syracusans time to prepare for the final battle, in which the Athenians were defeated, one retreating body under General Demosthenes being finally overcome on the Cacyparis, and shortly afterward the other under Nicias, on the Asinarius, near Noto. Both generals were captured and executed, and the thousands of other captives after several months' confinement in the *lattomie,* which were used for prisons, were sold as slaves, very few getting pardon, and these only being liberated because they could skilfully recite the verses of Euripedes. This defeat turned the tide of the Peloponnesian War, Athens lost its prestige, and Thucydides, who described the conflict, says this "event was the most important which befell the Greeks during this war, or indeed in any others in Greek history which are known to us."

In the fourth century B. C. the Carthaginians overran Sicily, and under Himilco besieged Syracuse. Dionysius I was then ruler, and aided by a pestilence in the camp of the besiegers, drove them off, afterward defeating their allies. He greatly extended and embellished the city, ruled over the chief part of Sicily and Greece, and became one of the most powerful sovereigns of the time, his reign continuing nearly forty years. He built a wall, of huge blocks of stone, around the city, erecting the northern portion about 402, and is said to have constructed

about three and one-half miles of it within a period of three weeks, employing sixty thousand workmen and six thousand yoke of oxen at the task. On the rocky mainland, amid the relics of the ancient city, northwest of the island, is the *Lattomia del Paradiso,* a large ancient quarry over a hundred feet deep, from which much of the material for this wall and the buildings was taken. Adjoining is another, now known as the "Ear of Dionysius," having an enormous entrance, being a grotto hewn in the rock, two hundred feet deep, seventy-four feet high and about thirty feet wide, constructed in the form of the letter S, and making a limestone tunnel six hundred feet long, beyond which the roof descends. At the farther extremity of the high archway, and about sixty feet from the floor, there is a small concealed chamber excavated in the rock. This *lattomia* has the most remarkable acoustic properties, the slightest sound in the grotto being heard at the inner end, and the tradition is that Dionysius was wont to sit in this hidden chamber, to listen to the conversation of his prisoners in the grotto, as they stealthily whispered their plots. Other *lattomie* have similar properties, and it is said the grim old "tyrant of Syracuse" used several of them for prisons. His son and successor, Dionysius II, did not have the father's force of character, and was repeatedly banished. Agathocles usurped the power in 317, ruling twenty-eight years, when he was poisoned. The final period

of Syracusan prosperity came in the third century, when Hiero II became king, ruling for nearly sixty years, and having among the famous men of his time Theocrites and Archimedes. At first Hiero was an ally of the Carthaginians in the Punic war, but subsequently became the ally of Rome.

In 216 B. C. Hieronymus succeeded, and allied himself with the Carthaginians. He was assassinated, and afterward the Romans, under Marcellus, made the famous siege, continuing two years, in which the defence was greatly aided by the mechanical and scientific genius of Archimedes. Ancient Syracuse extended over the precipitous coast, northward from the island of Ortygia, upon a broad limestone plateau called the Achradina. Its western side was defended by the wall that stretched southward to the Porto Grande, then known as the "Great Harbor," while the Porto Piccolo, or "Small Harbor," nestled under the cliffs to the northward of the island Ortygia. Another strong wall defended the southern part of the Achradina toward the sea front. To the northwest, the plateau was called the Tyche, from a Temple of Fortune, while westward and south of the Tyche, was the terrace of Neapolis above the "Great Harbor." The plateau westward of Tyche and Neapolis, contracted and ascended into the Epipolæ, the highest point of the ancient city, it being so named, according to the explanation of Thucydides, because it was above or on top of the

rest of the city. Thus the ancient Syracuse embraced distinct communities — Ortygia, the Achradina, the Tyche, the Neapolis, and the Epipolæ,— included in a circumference of about fourteen miles, over which the remains of its magnificence are now thickly strewn. Around this aggregated city, on the land side, Dionysius I constructed the great wall, which can be plainly traced. When Marcellus besieged Syracuse, he attacked both from the north and from the sea, the coast curving around from north to west, and thus enclosing the Tyche by a bay known as Tregilus harbor. While the Syracusans were celebrating a festival, a band of Romans, coming by sea, scaled the Tyche walls near this harbor, and proceeding along the summit, captured its defensive work of Hexapylon, and being followed by large reinforcements, the Romans soon got possession of the Tyche, Neapolis and the crowning fortress of the Epipolæ. Then they proceeded to attack the wall defending the Achradina on its western side, along its entire length, which required the Syracusans to make a defence upon such an extended line, that their forces had to be withdrawn from the island Ortygia to provide help. This withdrawal gave the Romans opportunity to avail of the guidance of a traitor, who managed to introduce the crew of a Roman vessel into the town, by means of the Fountain of Arethusa and its tunnel through the limestone, so that the Roman legions soon got pos-

session of the island, and crossing to the Achradina behind the wall, captured it and became the victors. Archimedes was slain in the street by a Roman soldier, who did not know him, and a vast booty was carried off to Rome. Thus Syracuse fell, 212 B. C., the conquerors forbidding the people to live any longer on the island Ortygia; the city sank from its high estate, and became thereafter only a Roman provincial town. In fact it was so reduced by the civil wars of Pompey's time that it had to be repeopled. Belisarius captured it in the sixth century of the Christian era, the Saracens in the ninth century, and the Normans got possession in 1085.

Syracuse was one of the earliest of the Italian cities to embrace Christianity. When the Apostle Paul journeyed to Rome, he spent three days in the city, and, according to the tradition, St. Peter sent St. Marcian hither from Antioch to preach Christianity in the year 44. The modern town, like the original Greek settlement, is on the island Ortygia, its cathedral, on the western side near the Fountain of Arethusa, being the principal building. On this site originally stood, according to the tradition, a Temple of Minerva, which became a Christian church in the seventh century and a mosque after the Saracenic conquest. This temple was described by Cicero, as a sumptuous edifice filled with the treasures which Verres plundered. It was about one hundred and eighty feet long and seventy feet

wide, elevated on three steps forming a basement, and as it was largely availed of in the subsequent church construction, and was also altered by the Saracens, it presents a peculiar architecture. The cathedral has Moorish battlements rising above the walls, and on the northern side covering the old Doric columns, their capitals and entablature. There were originally thirty-six columns in the temple, twenty-eight feet high and over six feet in diameter. Eleven of these columns are now on the northern side, while in a most curious way, nine columns on the southern side project into the church interior. There is an interesting museum of art treasures and antiquities opposite the cathedral, while to the northward are the ruins of another Greek temple, popularly called the Temple of Diana, but from an inscription, recently disclosed in excavating the front, it is said to have really been dedicated to Apollo. The modern Syracuse is almost entirely confined to the island and around these ancient temples.

The five separate cities forming ancient Syracuse, are said by Strabo to have had a circumference of twenty miles, but on much of this surface on the mainland, every trace of buildings had disappeared. Two vast aqueducts, leading from the hills to the northwest, supplied water. One of these still flows near the summit of the Epipolæ, falls over a cascade by the ancient theatre, and the stream then runs

away to the harbor. The other, coming from an equal height, skirts the northern wall, sends several branches southward through the Achradina, and then proceeds by a subterranean passage to the sea. Near the entrance to the "Ear of Dionysius," and adjacent to the aqueduct, is the Greek theatre, erected in the fifth century B. C., hewn in semicircular form in the rock, measuring about five hundred feet in diameter, and having forty-six tiers of seats still visible, with traces of others. There are inscriptions recording the names of Hiero II, his queen Philistis, and his daughter-in-law Nereis, with also an invocation to Zeus Olympius. From the hill where the theatre stands, there is a superb view over the town, the harbor and the spacious Ionian sea beyond. In the foreground is the Amphitheatre of Augustus, two hundred and thirty feet long and one hundred and thirty feet wide, a massive Roman construction, having blocks of marble, that were taken from the ancient parapet by the barbarians, still lying in the arena. Nearby is the great altar of Hiero II, six hundred feet long and seventy-five feet wide, whereon he made sacrifices to the gods, among them the annual offering of hundreds of oxen, commemorating the expulsion of Thrasybulus, a ceremony observed for many years. On the higher plateau, above the theatre, stood the temples which Gelon erected to Demeter and Proserpine, with spoil taken from the Carthaginians, and here was the Temenos of Apollo,

with the statue of the god that the citizens prevented Verres from carrying off, and which Tiberius afterward removed to Rome. On the highest point of the northwestern plateau and the verge of the Epipolæ, was the fortress angle in the enclosing wall erected by Dionysius. Five massive towers guard this angle, where the northern and western walls come together, and two deep ditches are hewn in the rock, whence various subterranean passages lead to other parts of the defences. This was the ancient Fort Euryelus, now known as Mongibéllesi. The plateau summit beyond rises over six hundred feet above the sea.

The railway northward, from Syracuse to Catania and the Strait of Messina, is constructed near the coast, going around the bases of the higher hills of the Achradina. At the outset it skirts the shore of the " Small Harbor," north of the island Ortygia, that Dionysius formed by building a breakwater across the sea entrance, a narrow opening admitting the vessels. The whole region of the Achradina is covered with remains of ancient fortifications and buildings. Just north of the railway, and near the harbor, conspicuously rises the steeple of the Church of Santa Lucia, standing on the spot where this patron saint of Syracuse suffered martyrdom. There are extensive catacombs of the early Christian era, and these, which are among the attractions of the Achradina, stretch far to the northward, being usu-

ally entered from the monastery of the Church of St. Giovanni to the northwest. This church was built in the twelfth century, and has beneath, the relics of a Temple of Bacchus, out of which in the fourth century was hewn the earliest church in Christendom, outside of the Holy Land. This work was done beneath the temple, the better to conceal its existence during those days of persecution. It is now called the Crypt of St. Marcian, who is said to have been bound to one of the granite columns, and suffered martyrdom. In the temple was found the marble mixing bowl used in the Bacchanalian orgies, having a Greek inscription, and ornamented with bronze lions as supporters, it now being used as the baptismal font in the cathedral. Steps descend to the ancient church, in which is St. Marcian's tomb. When St. Paul landed at Syracuse, the legend says that he preached in the temple, which was afterward converted into the church. Farther westward are tombs with Grecian façades, said to be the burial places of Timoleon and Archimedes. To the northeast is a suppressed Capuchin monastery, now used for farm buildings, and nearby is the wildest and most impressive of the ancient *Lattomie,* the *Lattomia de Cappuccini.* This spacious quarry, displaying a most beautiful exhibition of luxuriant foliage, was the prison, in the time of Dionysius, of over seven thousand Athenian captives, who wasted away under privation and disease, intensified by the

burning rays of an almost tropical sun, until death relieved their sufferings. Ascending to the higher plateau northward, there is a grand view got of the noble cone of the distant Mount Etna.

The ancient river Anapus, having its sources in the western hills, flows out to the "Great Harbor" in a course of about sixteen miles, and debouches amid the marshlands south of Syracuse. Upon a low hill, just beyond this little river, and rising above the swamps, stand a solitary pair of mutilated columns in a field, which are all that remains of the famous temple of the Olympian Zeus erected in the early period of Syracuse. In this temple was a statue of Zeus, which Cicero described as very beautiful, and Gelon furnished it with a golden robe, but Dionysius, who needed the gold, removed the robe, as he said, "out of regard for the comfort of the god," because it was "too cold in winter and too heavy in summer." This hill and temple became of military importance when Syracuse was besieged, and Nicias occupied it at the beginning of the Athenian attack, but fearing the wrath of Zeus, he did not disturb its treasures. The Carthaginians held it in their sieges, and Marcellus, in 213, found it a great point of vantage. Near the temple was the tomb of Gelon. Coming out from the southward, the Cyane brook falls into the Anapus on the northwestern side of the hill. Both streams are narrow and filled with water-plants. The source of the

Cyane is the famous fountain of Cyane, an azure spring of the clearest water, and abounding with fish. It is thirty feet deep, yet the stones on the bottom can be distinctly seen through the completely transparent fluid. Cyane was a lovely water nymph, said to be the wife of Æolus, the god of the winds, who lived north of Sicily in the Æolian islands. Her dearest playmate was Proserpine, whom Pluto carried off to Lake Pergusa and the infernal regions, and when Cyane sought to rescue her, the nymph was changed into this fountain. The ancient Syracusans celebrated here an annual festival in honor of Proserpine. This little stream is famous as the only place in Europe where the papyrus grows wild in its native luxuriance. The upper waters are thickly bordered by the lofty plants, some twenty feet in height, their graceful feathery tufts, particularly in the autumn, coming up thickly with the castor-oil plant, and giving a pleasant feature to the landscape. Upon the Saracenic occupation, these plants were brought by the Arabs from Egypt and introduced here. They provided the material of the original paper makers. At the bottom of the stalk there is about eight to ten inches of solid white, celery-like juicy stem, with parallel fibres, which can be sliced into thin strips of moist shavings an inch or two wide. These are laid side by side on a flat surface, with the edges just overlapping, and are covered with another similar layer placed cross-

wise. Pressed with a flatiron, the sap glues them together, and thus forms the sheet of paper of the ancient Egyptian, which set the fashion in paper-making for the world. From this came writing, and then printing, finally developing into the modern newspaper with its vast influence.

> Here shall the Press the People's right maintain,
> Unawed by influence, and unbribed by gain;
> Here patriot Truth her glorious precepts draw,
> Pledged to Religion, Liberty and Law.

Sicily is a wonderful island in its grand history and scenic attractiveness, but it will probably be best remembered as the chief scene of the great earthquake of December, 1908, the crowning catastrophe of this land of earthquakes. It will not be alone the memory of that awful tragedy, but rather of the unrivalled outburst of the world's sympathy and help that it called forth. The poet Lampton's invocation thus tells it:

> Say, earthquake, when you shake
> Ten thousand houses down, and crush a town;
> Lay waste the fields; disturb the sea;
> And hurl the helpless to eternity —
> Do you imagine, oh earthquake,
> That that is all you shake?
> Grim, palsying monster, it is not for you to know
> That further than destruction you may go;
> But there is more, earthquake: You shake
> The great world's heart until it pours
> The best that's in it on your shores.
> You shake the money from a million hands

Stretched out to help from far and nearby lands;
You shake the ever-living tree of sacred human sympathy;
You shake the thoughtless into active thought
Of making good the ruin you have wrought;
You shake the multiplicity of creeds
Into one common cause of human needs;
You shake the great world's heart until it yields
Its best on stricken cities and on riven fields.
Say, earthquake, though you shake
Much ill upon the smaller space,
You shake much good to all the human race,
Which needs such shocks as these
To wake its nobler energies.

END OF VOLUME I

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